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SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's full Name: Everett White Examiner #: 67057 Date: 11/12/2002
Art Unit: 1623 Phone Number 308-4621 Serial Number: 09/982,077
Mail Box: CM1-8B19 and Bldg/Room Location: CM1-8D12 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be search Include the elected species or structures, key words, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: See Bib Data Sheet

Inventors (please provide full names): See Bib Data Sheet

Earliest priority Filing Date: See Bib Data Sheet

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search the acylated cellobiose of Claims 1-23; the method for preparing the acylated cellobiose of Claims 24-26; and the method of thickening or structuring a water-immiscible liquid to for a cream, soft solid or solid of Claim 27. A search of the formula for the acylated cellobiose that is disclosed in Claims 1 and 24 is also requested. Also, a seach of the composition of Claims 28-50 and the cosmetic use of the composition of Claim 51 is also requested. A copy of the claims and abstract is provided.

The Bib Data Sheet which discloses the inventor names, title of the invention, and the earliest priority filing date is also provided.

****

STAFF USE ONLY

Point of Contact:
Alexandra Waclawiw
Technical Info. Specialist
CM1 6A02 Tel: 308-4491

	Type of Search	Vendors and cost where applicable
Searcher:	NA Sequence (#)	STN
Searcher Phone #:	AA Sequence (#)	Dialog
Searcher Location:	Structure (#) 2	Questel/Orbit
Date Searcher Picked Up: 11-18	Bibliographic	Dr. Link
Date Completed: 11-18	Litigation	Lexis/Nexis
Searcher Prep & Review Time: 21	Fulltext	Sequence Systems
Clerical prep time:	Patent Family	WWW/Internet
Online Time: 45	Other	Other (specify)

PTO-1590 (1-2000)

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L14           12 S L12 AND 63/SX,SC
L15           16 S L14 OR L13
               SET SFIELD BI
L16       439726 S CREAM OR LOTION OR OINTMENT# OR TOPICAL OR WATER (3A) IMMISCI
L17            3 S L16 AND L15
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STRUCTURE FILE UPDATES:   15 NOV 2002  HIGHEST RN 473758-49-5
DICTIONARY FILE UPDATES:  15 NOV 2002  HIGHEST RN 473758-49-5

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
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Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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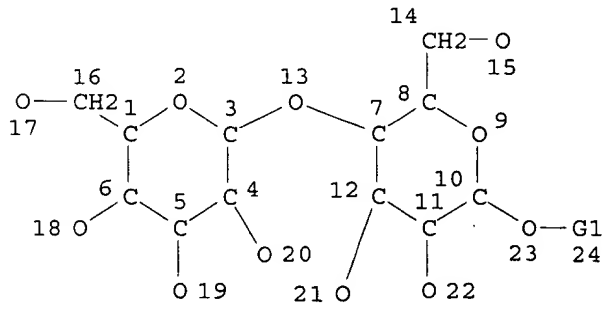

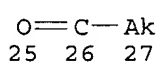

broad structure at least one acyl group

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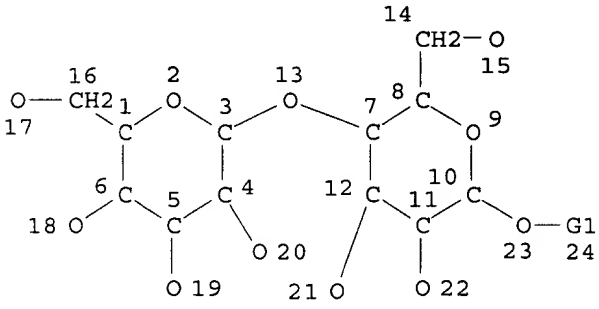

narrower search at least 6 acyl groups.

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STEREO ATTRIBUTES: NONE
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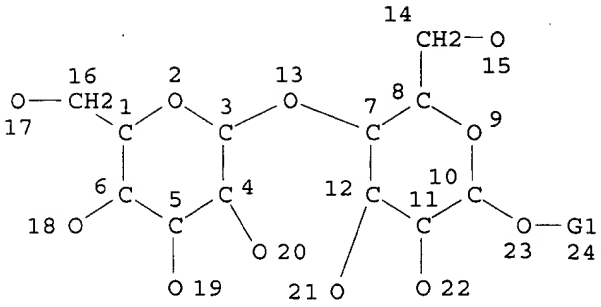

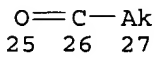

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100.0% PROCESSED 345 ITERATIONS (1 INCOMPLETE) 102 ANSWERS
SEARCH TIME: 00.01.43

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FILE COVERS 1907 - 18 Nov 2002 VOL 137 ISS 21
FILE LAST UPDATED: 17 Nov 2002 (20021117/ED)

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the CAS Roles thesaurus (/RL field) in this file.

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L12         147 S L9 NOT L10
L13           5 S L12 AND L11
L14          12 S L12 AND 63/SX,SC
L15          16 S L14 OR L13
                SET SFIELD BI
L16      439726 S CREAM OR LOTION OR OINTMENT# OR TOPICAL OR WATER (3A) IMMISCI
L17           3 S L16 AND L15

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L10  ANSWER 1 OF 28  HCAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:         2002:714120  HCAPLUS
DOCUMENT NUMBER:          137:252741
TITLE:                    Antiperspirant formulations containing polyhydric
                          alcohols and silicones
INVENTOR(S):              Abend, Sven Jorg Willi Max; Courtois, Jean-Philippe
                          Andre Roger; Cropper, Martin Peter; Fletcher, Neil
                          Robert; Grainger, Lynda; Murphy, Angela Mary
PATENT ASSIGNEE(S):       Unilever PLC, UK; Unilever N.V.
SOURCE:                   Eur. Pat. Appl., 15 pp.
                          CODEN: EPXXDW
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     EP 1240893         A2   20020918       EP 2002-251682   20020308
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.:                    GB 2001-6601     A  20010316
AB   Structured antiperspirant emulsion formulations for topical application to
     human skin in a method for controlling sweat and body odor generation
     comprising a hydrophilic phase contg. an aluminum and/or zirconium
     astringent salt dispersed in a structured continuous oil phase can suffer
```

from problems of impaired sensory properties and impaired efficacy (sweat redn.). Such problems are overcome in structured antiperspirant emulsions in which the hydrophilic phase comprises 25-55%, the hydrophilic phase contains 0-15% polyhydric alc. by wt., and the emulsifier comprises an alkyl dimethicone copolyol, the wt. ratio of the hydrophilic phase to the emulsifier is selected in the range of 60:1, the structurant comprises an acylated sugar and the water-immiscible oil and the structurant are present in a wt. ratio of from 1.5:1 to 8.5:1. Thus, a formulation contained Silkflo-364 28.20, DC-245 18.80, cellobiose octanonanoate 15.00, Abil EM90 0.50, water 15.00, Rezal 36GP 22.50, and dispersed phase wt. 37.5%.

IC A61K007-32

CC 62-5 (Essential Oils and Cosmetics)

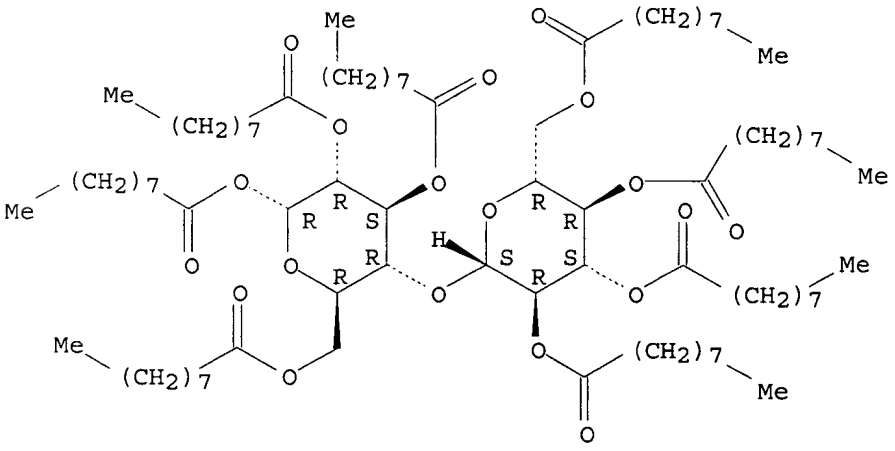
IT 56-81-5, Glycerol, biological studies 57-55-6, Propylene glycol, biological studies 528-50-7D, Cellobiose, acyl derivs. 541-02-6, Dow Corning 245 7631-86-9, Silica, biological studies 25189-70-2D, 1-Decene, homopolymer, hydrogenated 25265-71-8, DiPropylene glycol 111643-34-6, HDK-H 30 118367-64-9, Rezal 36GP 134910-86-4, Zirconal 50 145686-34-6, Abil EM90 **172585-66-9** 460048-47-9, Silkflo 364
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(antiperspirant formulations contg. polyhydric alcs. and silicones)

IT **172585-66-9**
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(antiperspirant formulations contg. polyhydric alcs. and silicones)

RN 172585-66-9 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 2 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:640664 HCAPLUS

DOCUMENT NUMBER: 137:159011

TITLE: Fatty acid esters of maltose for use in cosmetics

INVENTOR(S): Franklin, Kevin Ronald; Lasbistes, Nicolas; Webb, Nicholas; White, Michael Stephen

PATENT ASSIGNEE(S): Unilever P.L.C., UK

SOURCE: Brit. UK Pat. Appl., 80 pp.
CODEN: BAXXDU

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

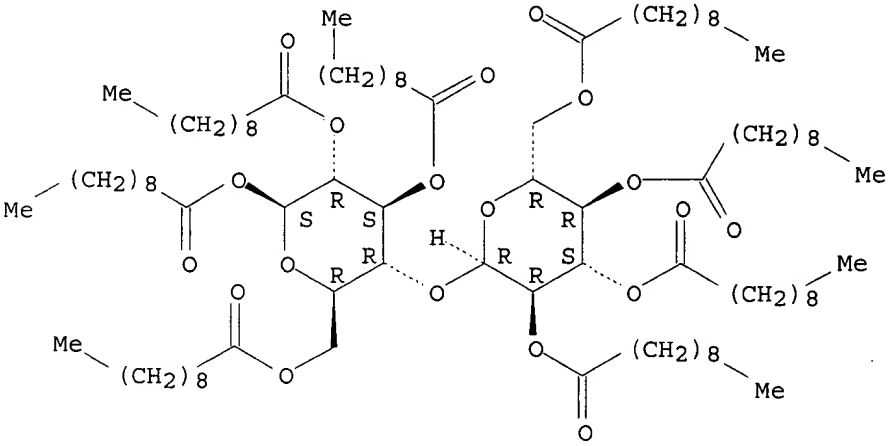
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2368011	A1	20020424	GB 2000-25439	20001017
US 2002076386	A1	20020620	US 2001-982150	20011017

PRIORITY APPLN. INFO.: GB 2000-25439 A 20001017

AB A cosmetic compn., preferably an antiperspirant compn., in solid or soft-solid form has a continuous phase which contains a water-immiscible liq. carrier and also contains a sturcturant which is partially or fully esterified .alpha.- or .beta. anomer of maltose. A mixt. of .alpha.-anomer and .beta.-anomer of maltose octadecanoate was prepd. by the reaction of maltose with sodium dodecanoate. An antiperspirant stick contained above acylated maltose 5, cyclomethicone DC-245 44, cetyl dimethicone copolyol 1, and Rezal-67 50%.

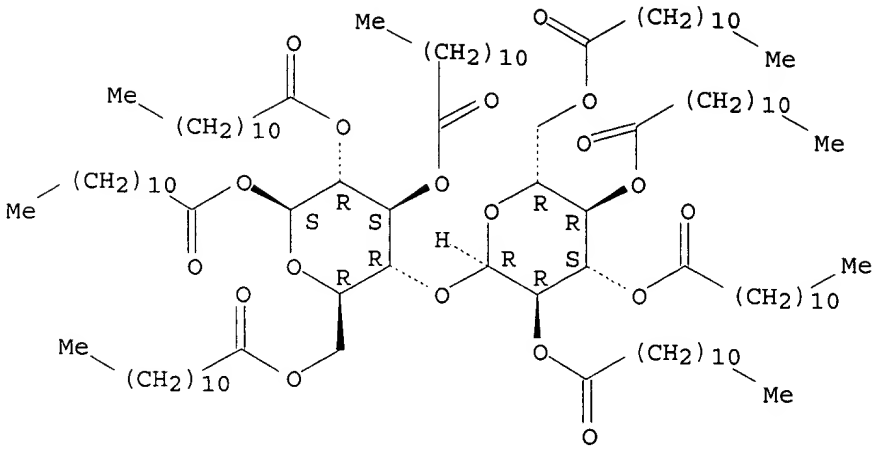
IC ICM A61K007-00
ICA A61K007-32
CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 33
IT 69-79-4DP, Maltose, esters with fatty acids **445381-82-8P 445381-84-0P 445381-86-2P 445381-88-4P** 445478-00-2P 445478-01-3P 445478-02-4P
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(fatty acid esters of maltose for use in cosmetics)
IT **445381-82-8P 445381-84-0P 445381-86-2P 445381-88-4P**
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(fatty acid esters of maltose for use in cosmetics)
RN 445381-82-8 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.alpha.-D-glucopyranosyl]-, tetradecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



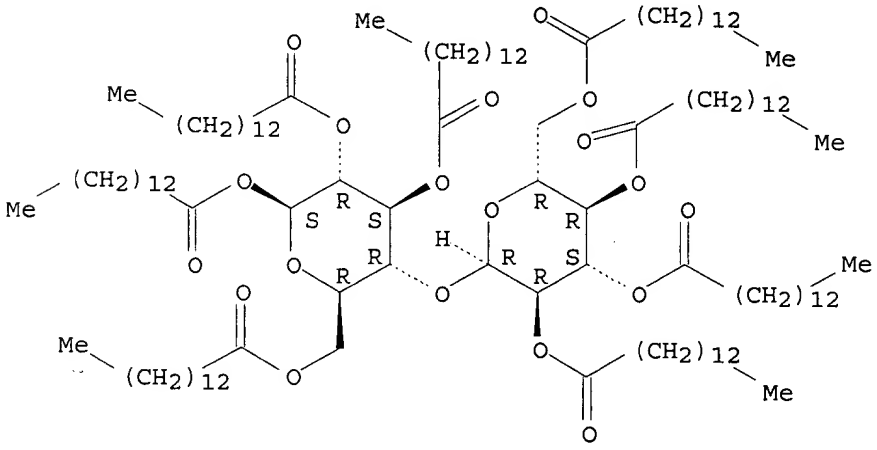
RN 445381-84-0 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.alpha.-D-glucopyranosyl]-, tetradodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



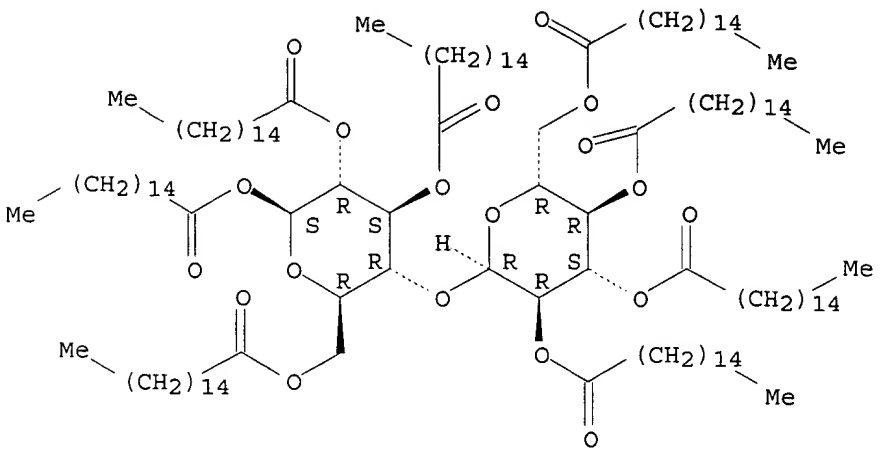
RN 445381-86-2 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxotetradecyl)-.alpha.-D-glucopyranosyl]-, tetratetradecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 445381-88-4 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxohexadecyl)-.alpha.-D-glucopyranosyl]-, tetrahexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 3 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:314952 HCAPLUS
DOCUMENT NUMBER: 136:345481
TITLE: Preparation of cellobiose esters for use in cosmetics
INVENTOR(S): Franklin, Kevin Ronald; Hopkinson, Andrew; Webb, Nicholas; White, Michael Stephen
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV; Hindustan Lever Limited
SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002032914	A2	20020425	WO 2001-EP10869	20010918
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001093827	A5	20020429	AU 2001-93827	20010918
US 2002072506	A1	20020613	US 2001-982077	20011017

PRIORITY APPLN. INFO.: GB 2000-25437 A 20001017
WO 2001-EP10869 W 20010918

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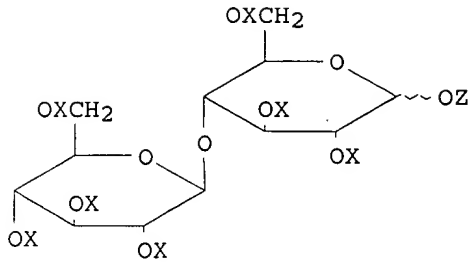

I

AB Acylated cellobiose compds. (CHME)which satisfy the formula I wherein X represents an acyl group (R-CO-) or H, Z represents an acyl group (R-CO-) or H and not more than a minority of X + Z residues represent H; R represents a satd. or unsatd., linear or branched chain hydrocarbon residue of 5 to 31 carbon atoms and R represents a residue, different from R, which is: (i) a satd. or unsatd., linear or branched chain hydrocarbon residue of 1 to 31 carbon atoms, or (ii) an arom. hydrocarbon residue, or (iii) a cycloaliph. hydrocarbon, each optionally substituted. CHME esters are particularly suited to thickening or structuring a water-immiscible liq., for example, a phase in a cosmetic formulation, such as antiperspirant or deodorant formulations, eg water in oil emulsions and esp. translucent ones. Cellobiose heptanonanoate benzoate ester (II) was prepd. by the reaction of cellobiose heptanonanoate (prepn. given) with benzoyl chloride. II was used to gel water-immiscible cosmetic liqs.

IC ICM C07H013-00

CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 24

IT **415681-14-0P 415681-15-1P 415681-16-2P**
415681-17-3P 415681-18-4P 415681-19-5P
415681-20-8P 415681-21-9P 415681-22-0P
415681-23-1P 415681-24-2P 415681-25-3P
415681-26-4P 415681-27-5P 415681-28-6P
415681-29-7P 415681-30-0P 415681-31-1P
415681-32-2P 415681-33-3P 415681-34-4P
415681-35-5P 415681-36-6P 415681-37-7P
415681-38-8P 415681-39-9P 415681-41-3P
415681-42-4P 415681-43-5P 415681-44-6P
415681-45-7P 415681-46-8P 415681-47-9P
415681-48-0P 415681-49-1P 415681-50-4P
415681-51-5P 415681-52-6P 415681-53-7P
415681-54-8P **415681-55-9P 415681-56-0P**
415681-57-1P
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of cellobiose esters for use in cosmetics)

IT **139432-95-4P**, .beta.-Cellobiose octanonanoate **415681-40-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of cellobiose esters for use in cosmetics)

IT **415681-14-0P 415681-15-1P 415681-16-2P**
415681-17-3P 415681-18-4P 415681-19-5P
415681-20-8P 415681-21-9P 415681-22-0P
415681-23-1P 415681-24-2P 415681-25-3P
415681-26-4P 415681-27-5P 415681-28-6P
415681-29-7P 415681-30-0P 415681-31-1P
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415681-38-8P 415681-39-9P 415681-41-3P
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415681-48-0P 415681-49-1P 415681-50-4P
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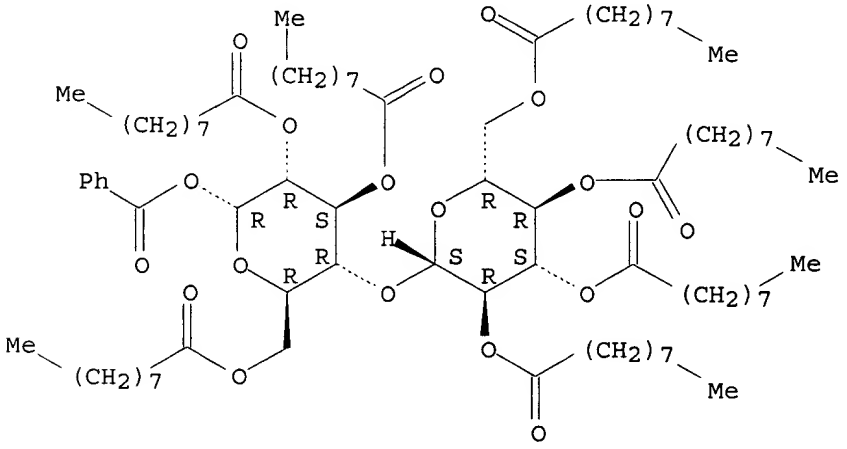
415681-55-9P 415681-56-0P 415681-57-1P
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of cellobiose esters for use in cosmetics)

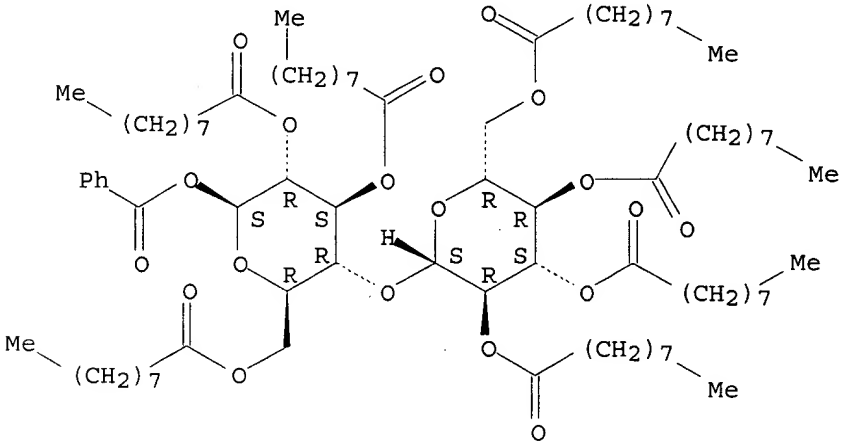
RN 415681-14-0 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-benzoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 415681-15-1 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-benzoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

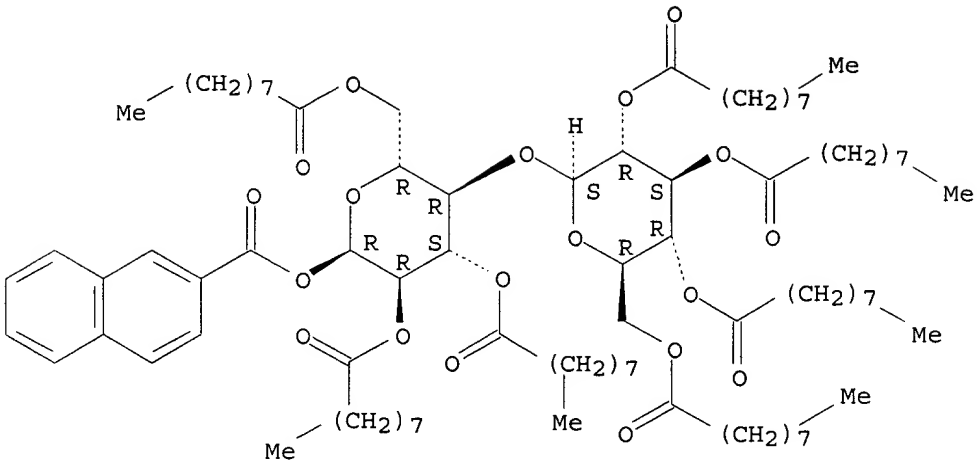
Absolute stereochemistry.



RN 415681-16-2 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-(2-naphthalenecarboxylate) 2,3,6-trinonanoate (9CI)

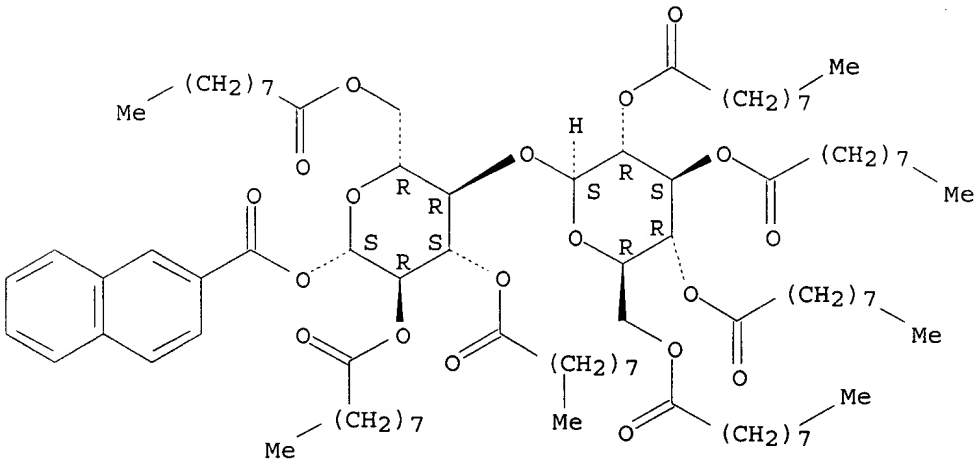
(CA INDEX NAME)

Absolute stereochemistry.



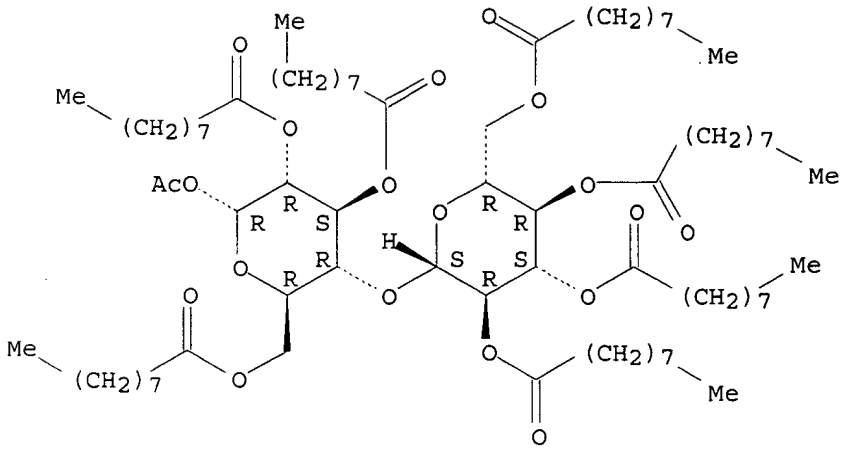
RN 415681-17-3 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-(2-naphthalenecarboxylate) 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



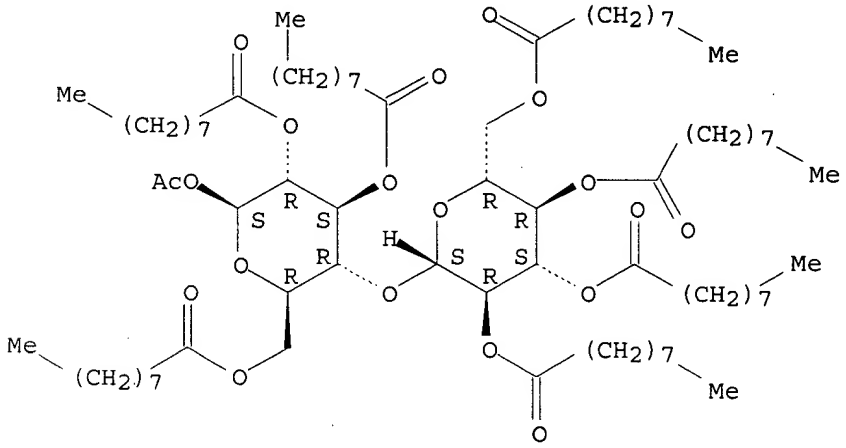
RN 415681-18-4 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-acetate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



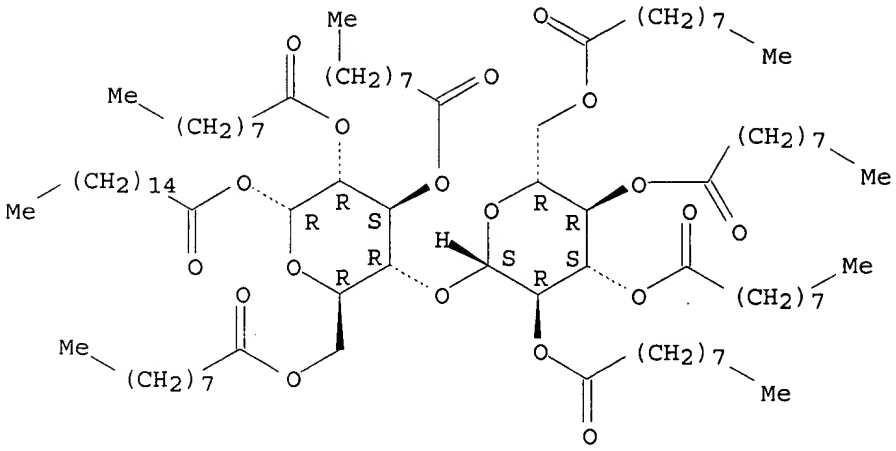
RN 415681-19-5 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-acetate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



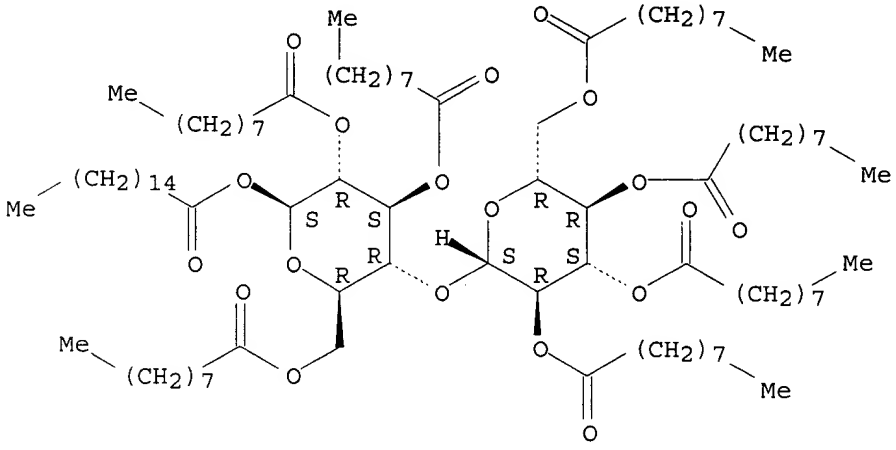
RN 415681-20-8 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-hexadecanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



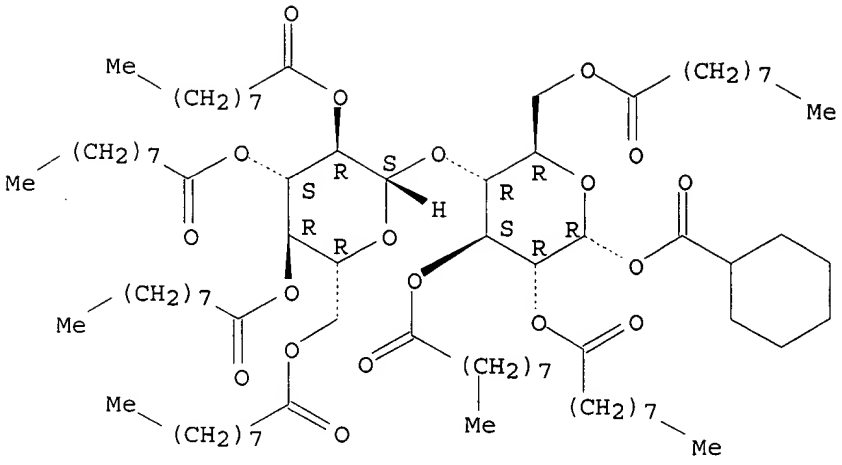
RN 415681-21-9 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-hexadecanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



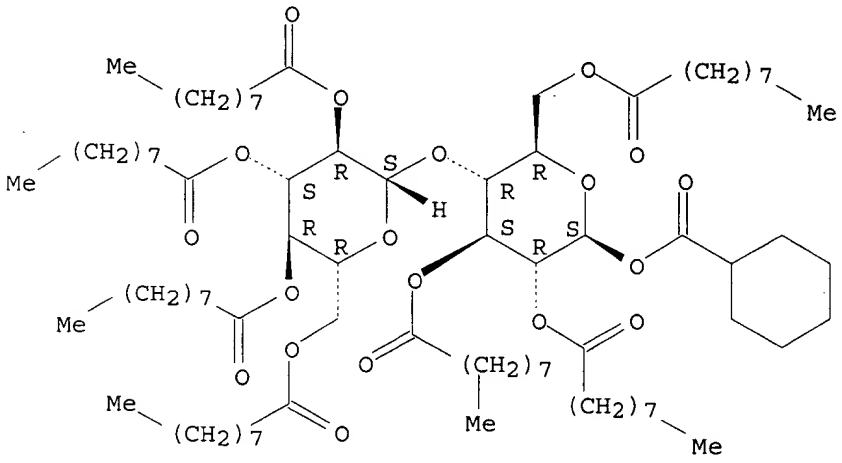
RN 415681-22-0 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexanecarboxylate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



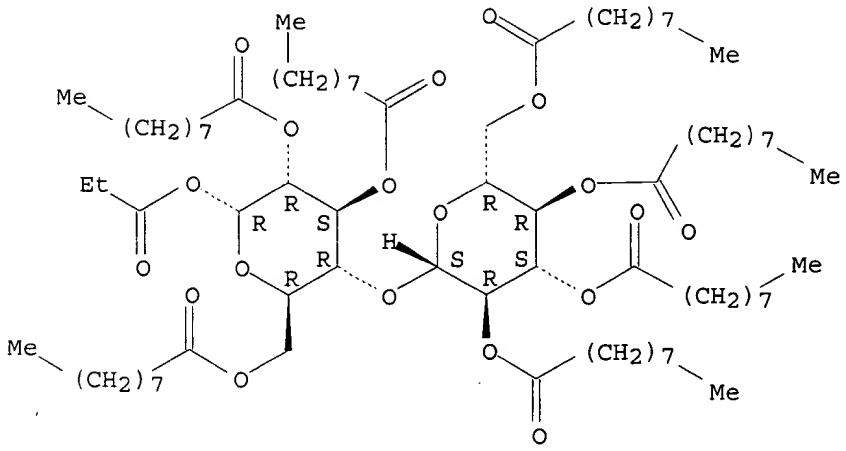
RN 415681-23-1 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexanecarboxylate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



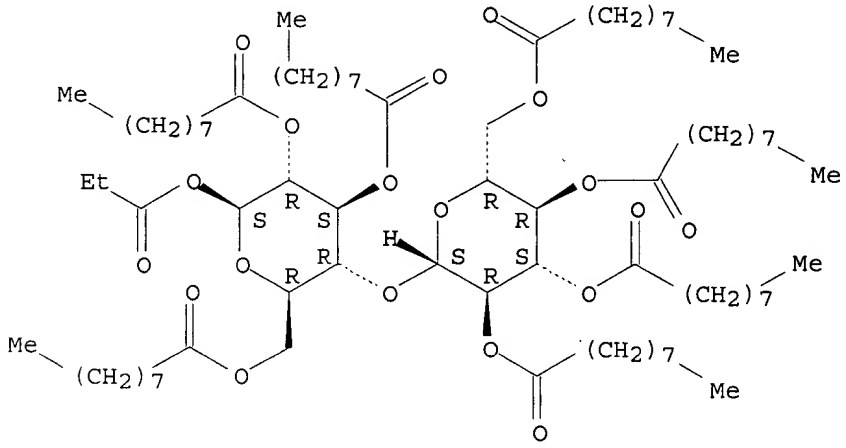
RN 415681-24-2 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-propanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



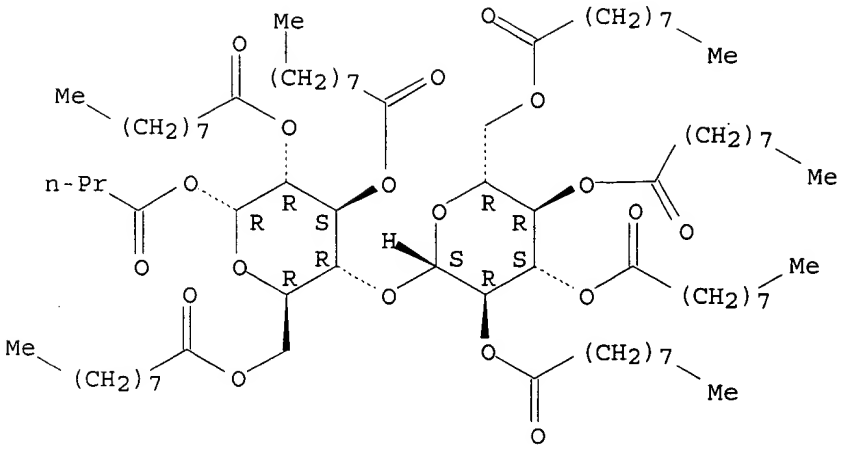
RN 415681-25-3 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-propanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



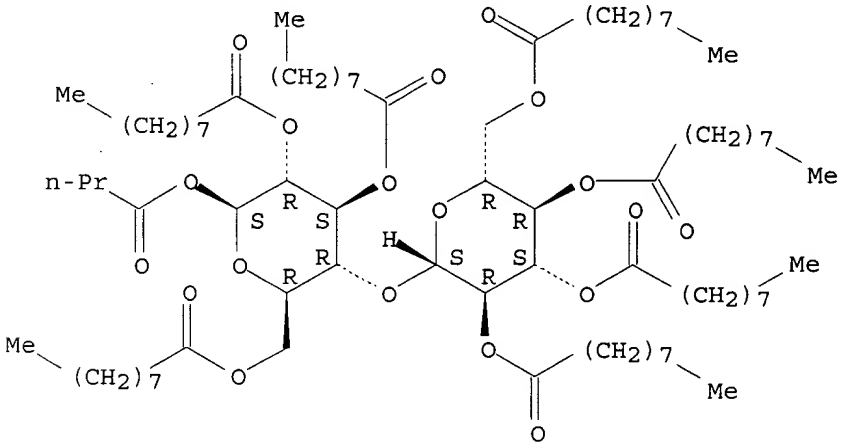
RN 415681-26-4 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-butanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



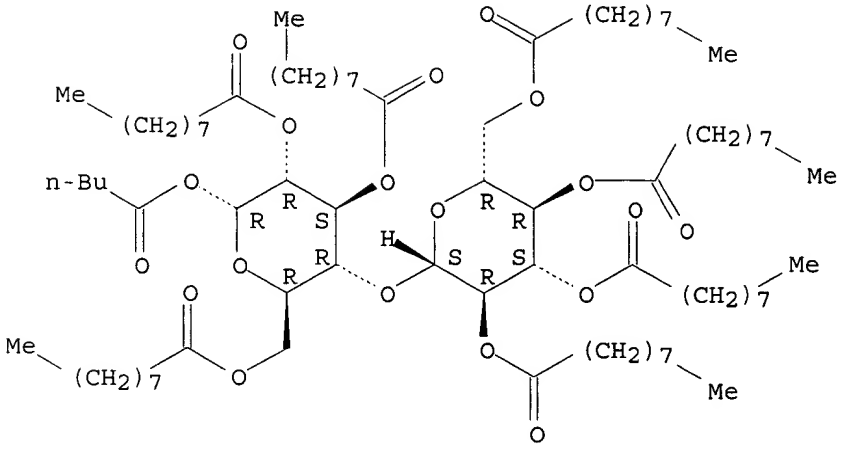
RN 415681-27-5 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-butanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



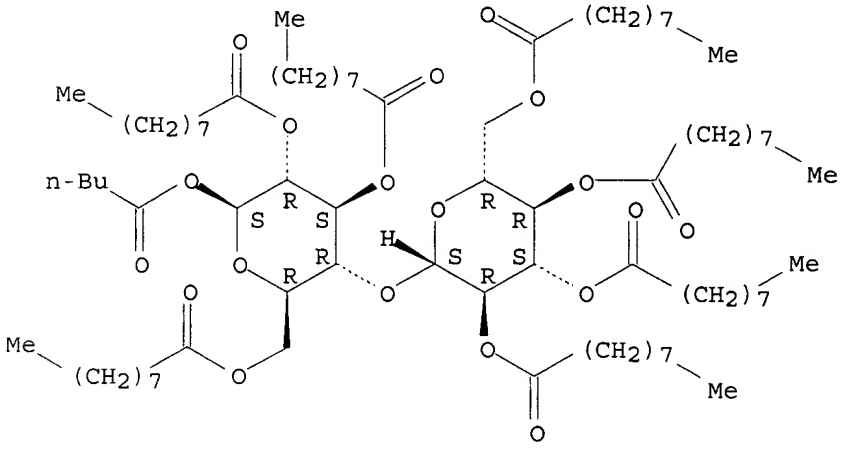
RN 415681-28-6 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-pentanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



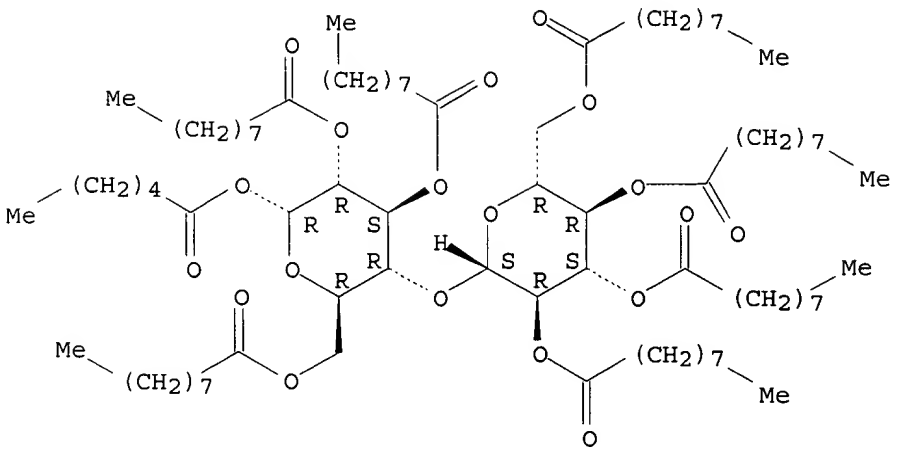
RN 415681-29-7 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-pentanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



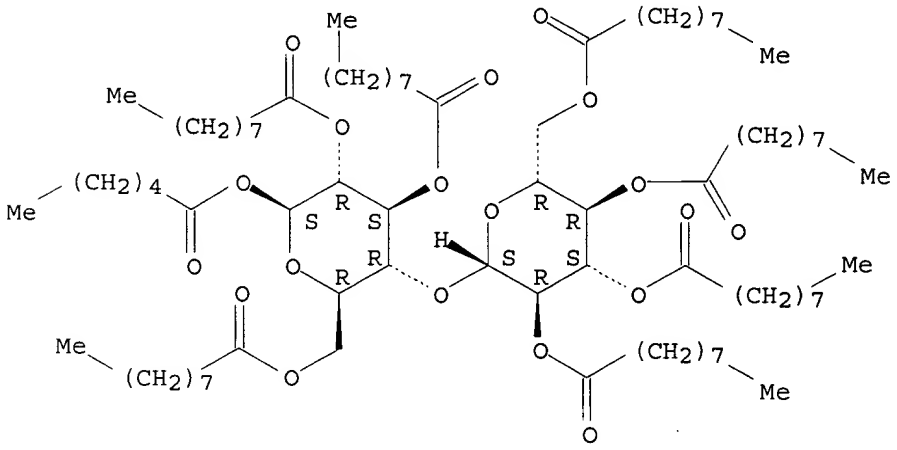
RN 415681-30-0 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-hexanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



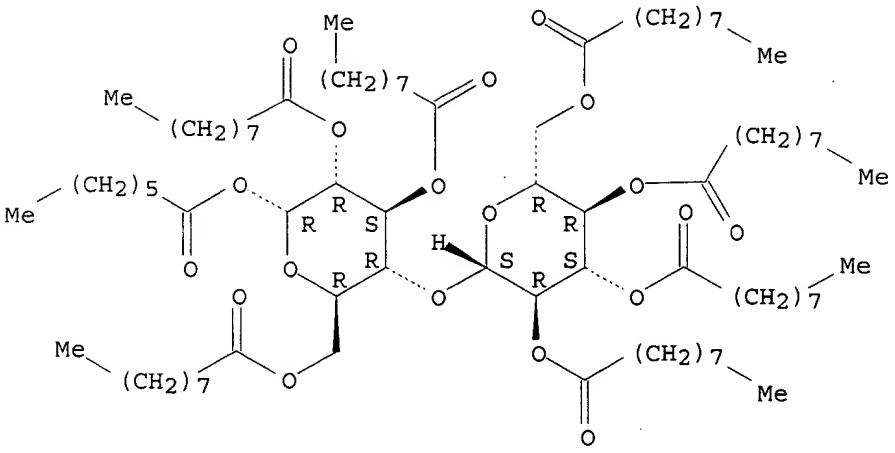
RN 415681-31-1 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-hexanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



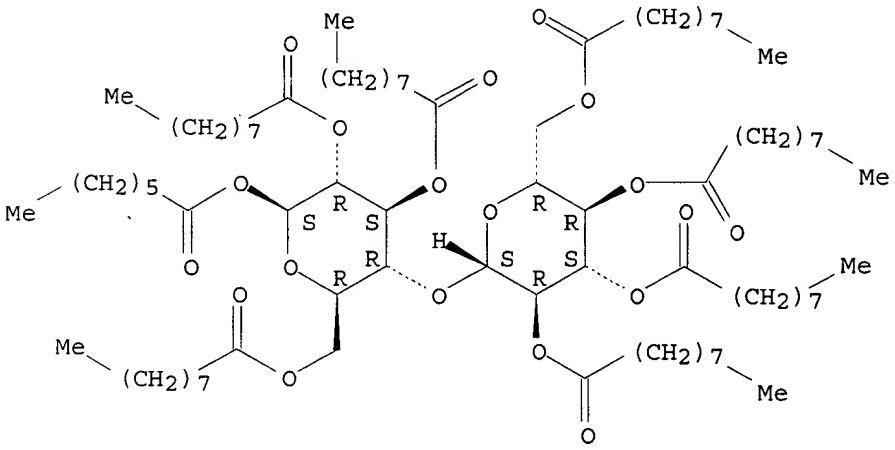
RN 415681-32-2 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-heptanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



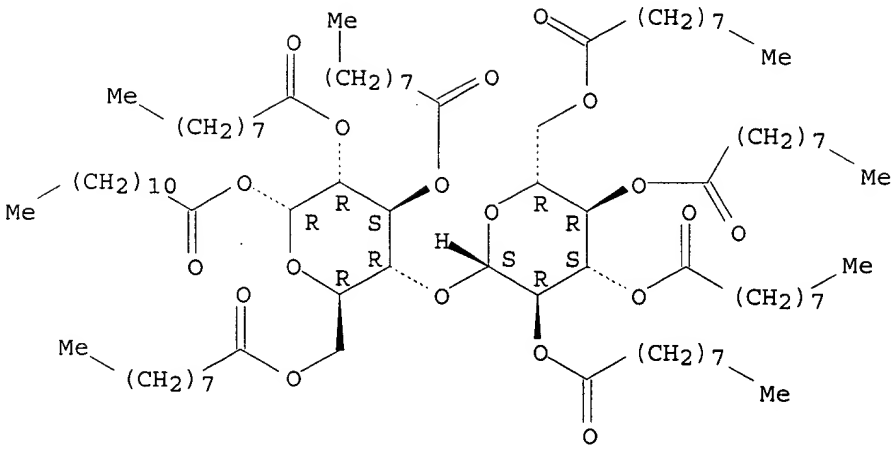
RN 415681-33-3 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-heptanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



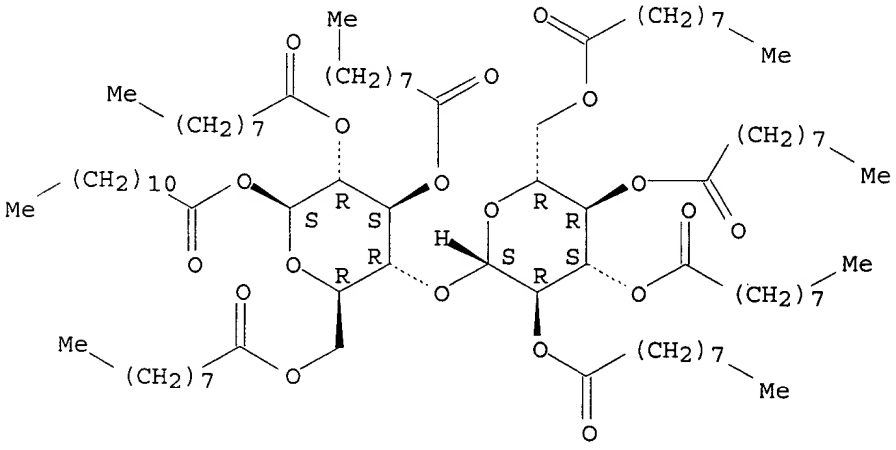
RN 415681-34-4 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-dodecanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



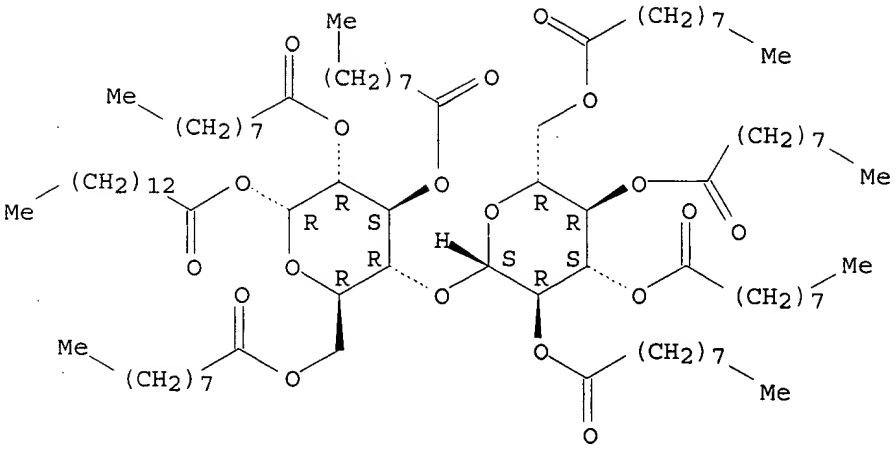
RN 415681-35-5 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-dodecanoate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



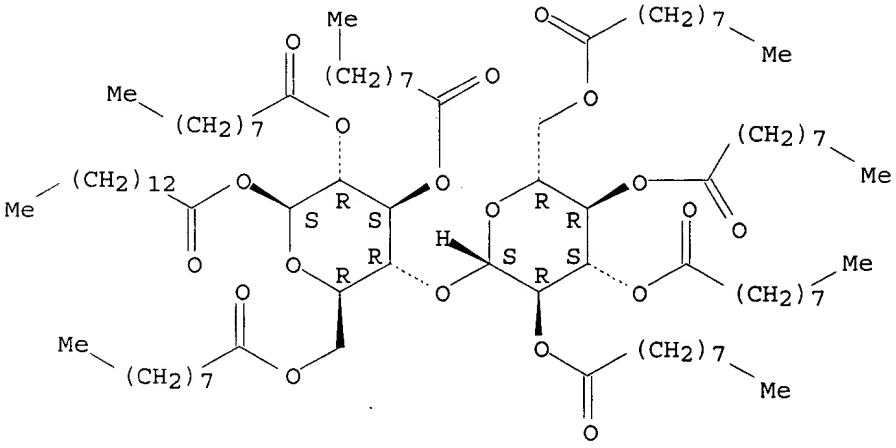
RN 415681-36-6 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-tetradecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



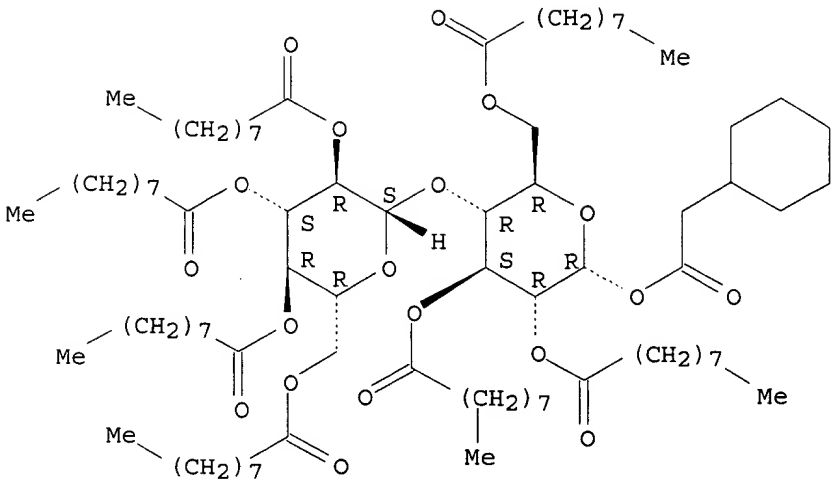
RN 415681-37-7 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 2,3,6-trinonanoate 1-tetradecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



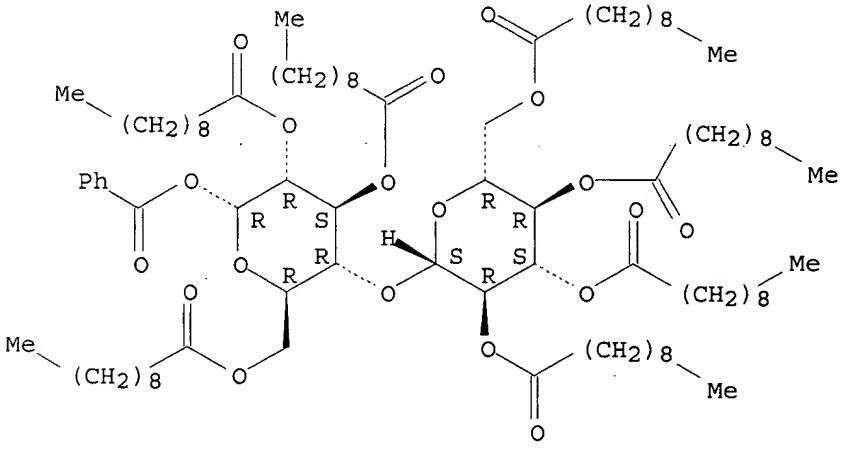
RN 415681-38-8 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexaneacetate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



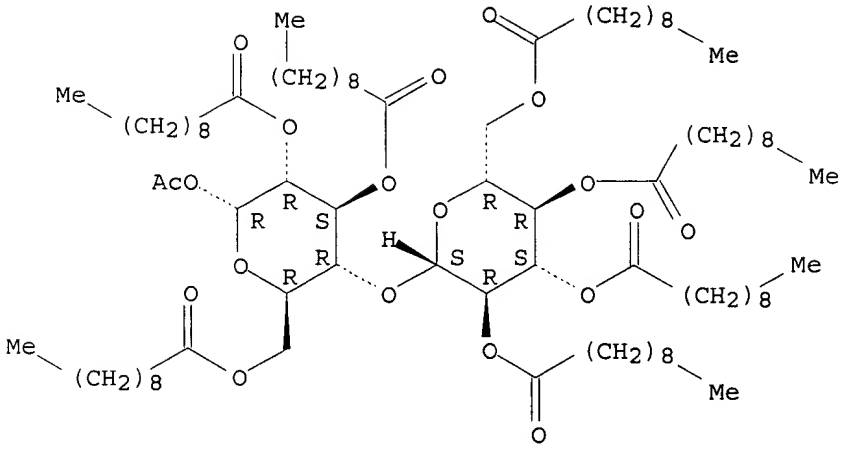
RN 415681-39-9 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-benzoate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



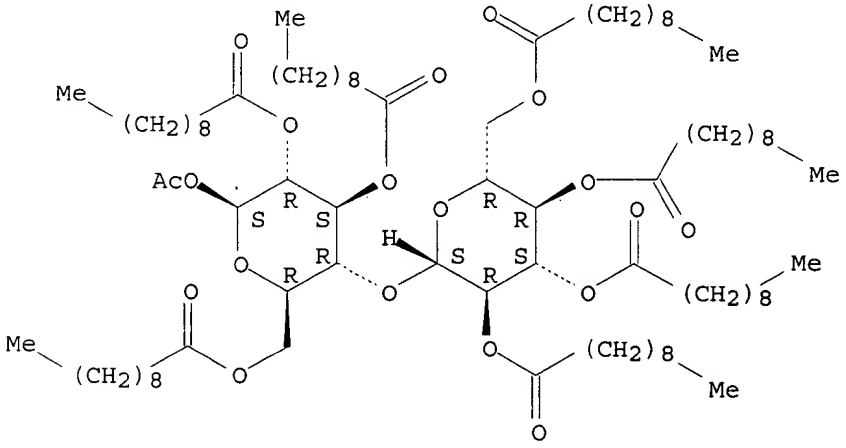
RN 415681-41-3 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-acetate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



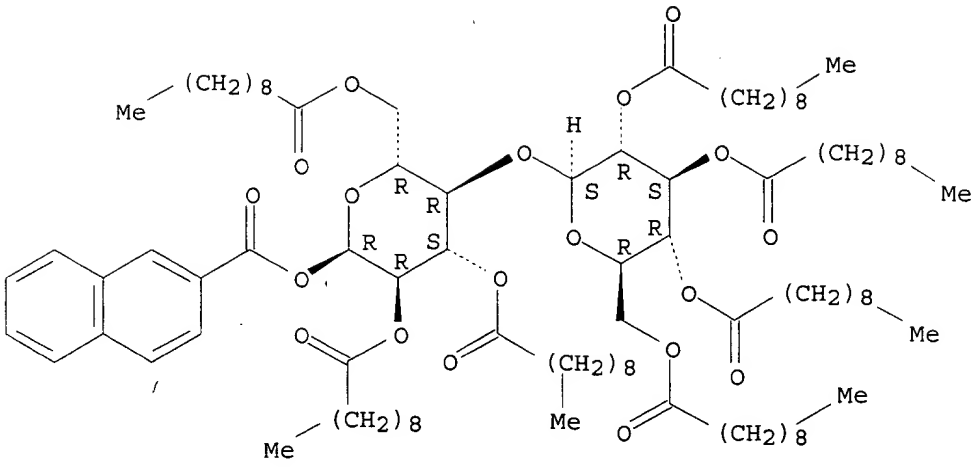
RN 415681-42-4 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-acetate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



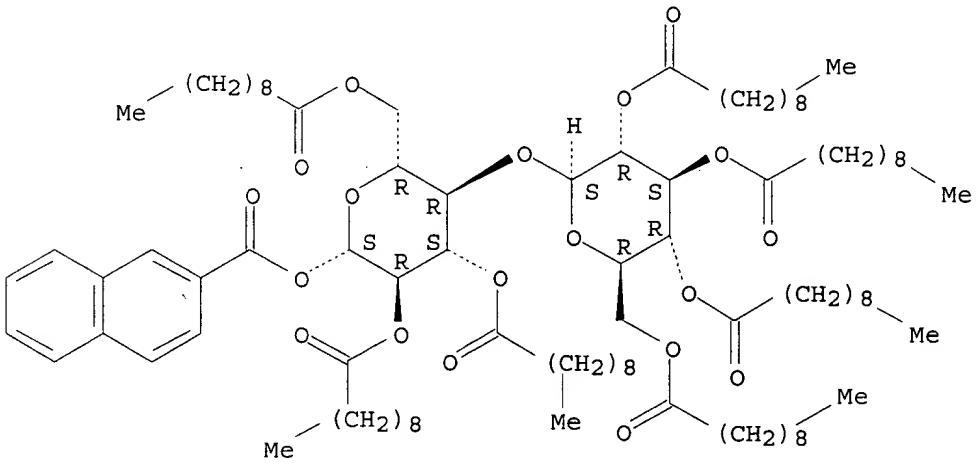
RN 415681-43-5 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-(2-naphthalenecarboxylate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



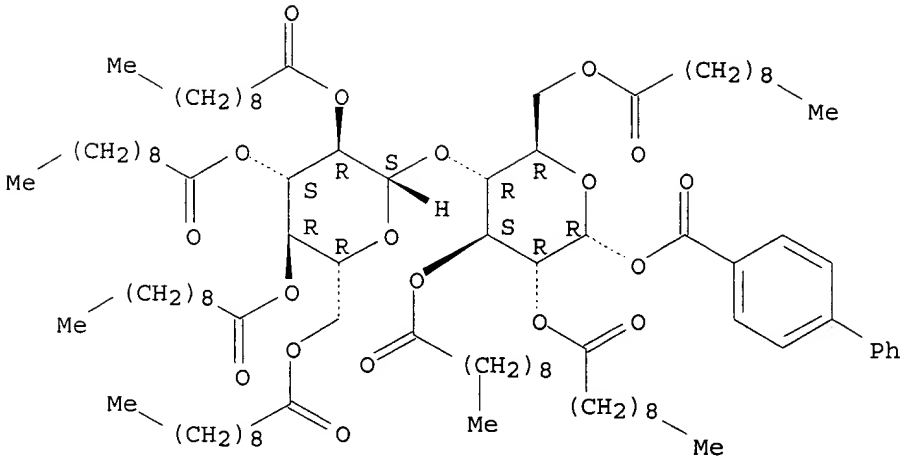
RN 415681-44-6 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-(2-naphthalenecarboxylate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



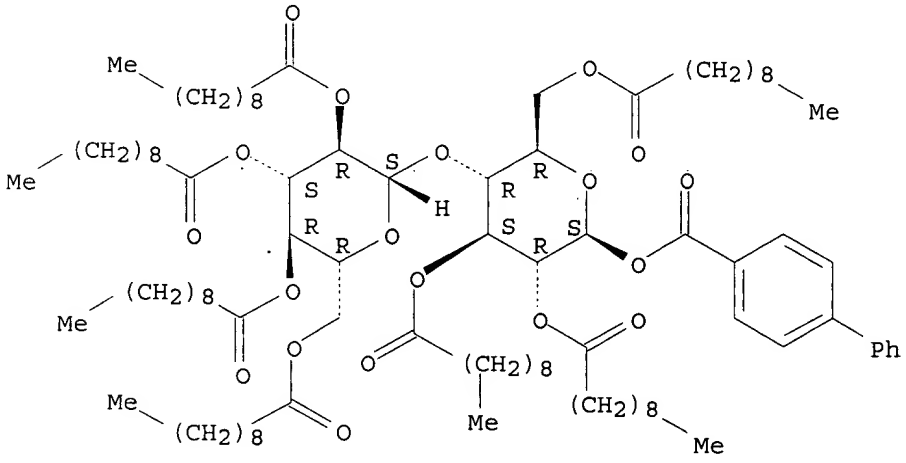
RN 415681-45-7 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-[1,1'-biphenyl]-4-carboxylate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



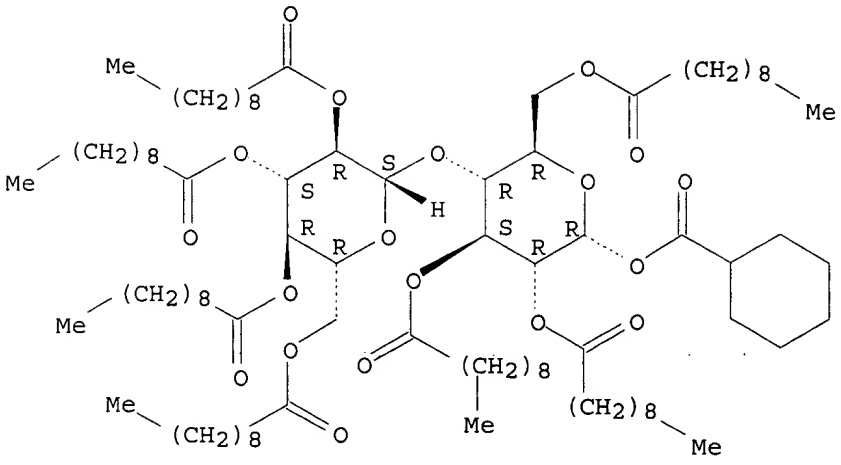
RN 415681-46-8 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-[1,1'-biphenyl]-4-carboxylate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



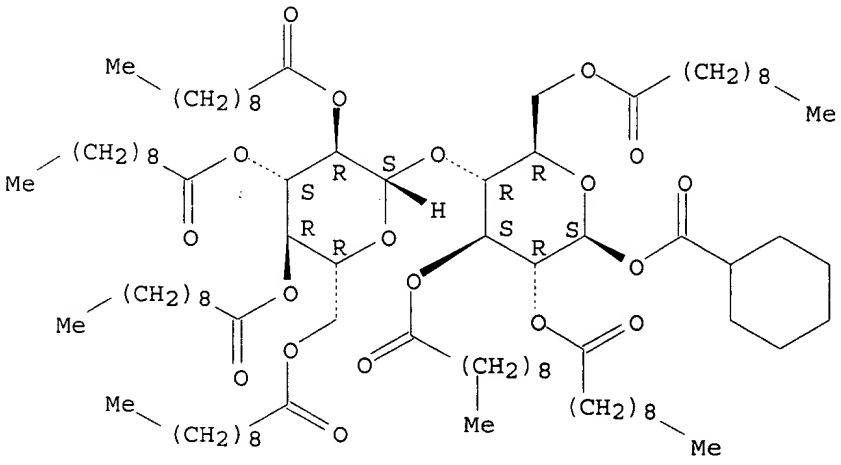
RN 415681-47-9 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexanecarboxylate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



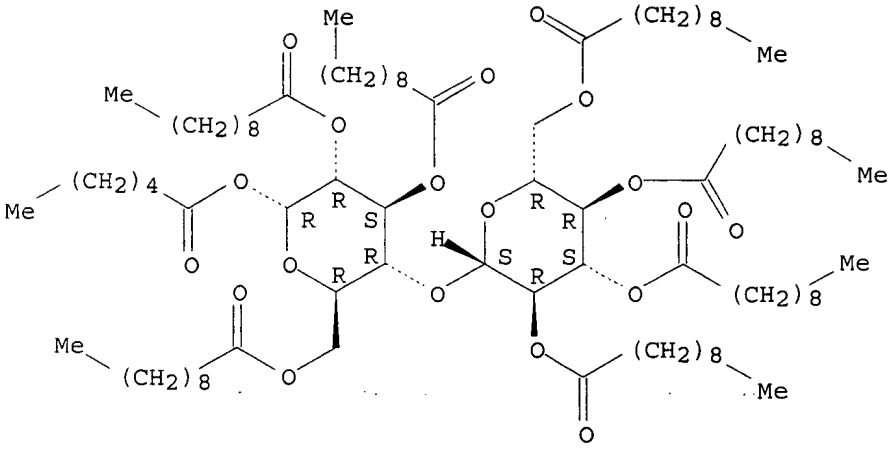
RN 415681-48-0 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexanecarboxylate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



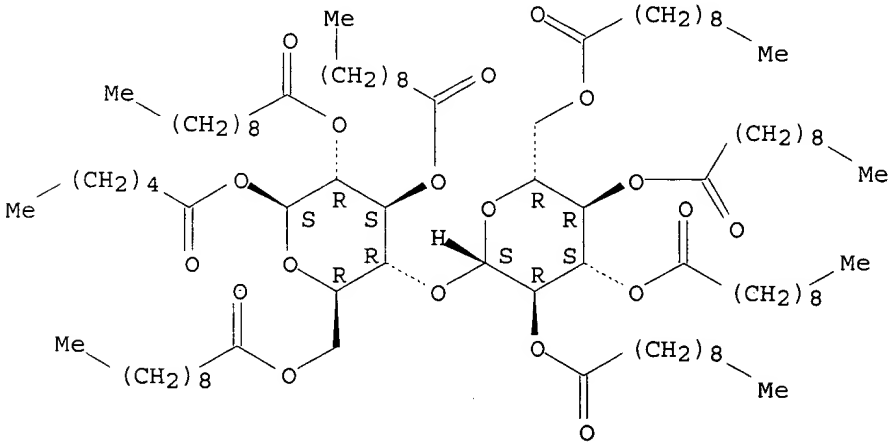
RN 415681-49-1 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-hexanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



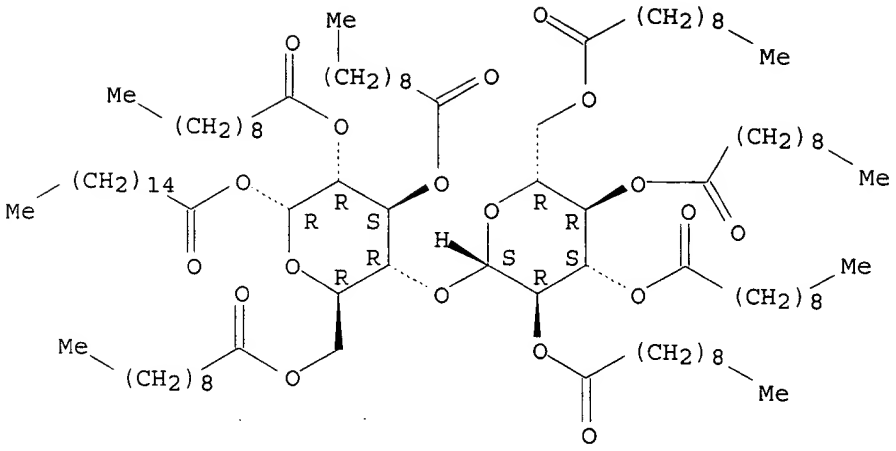
RN 415681-50-4 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-hexanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



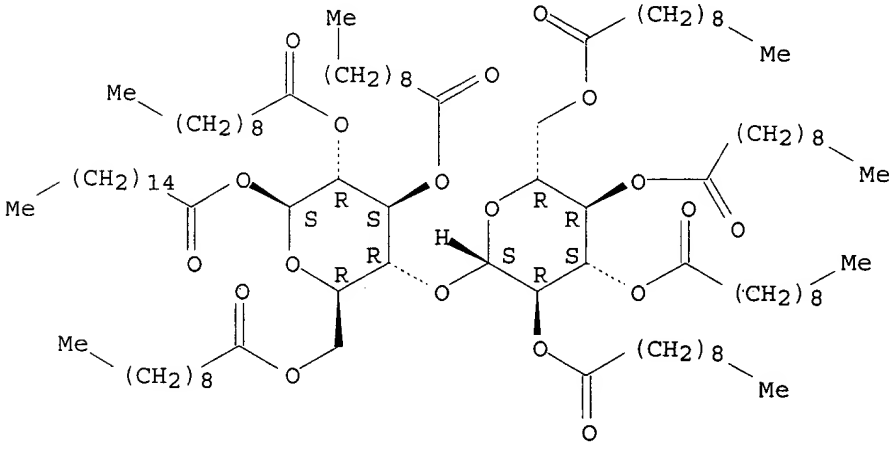
RN 415681-51-5 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



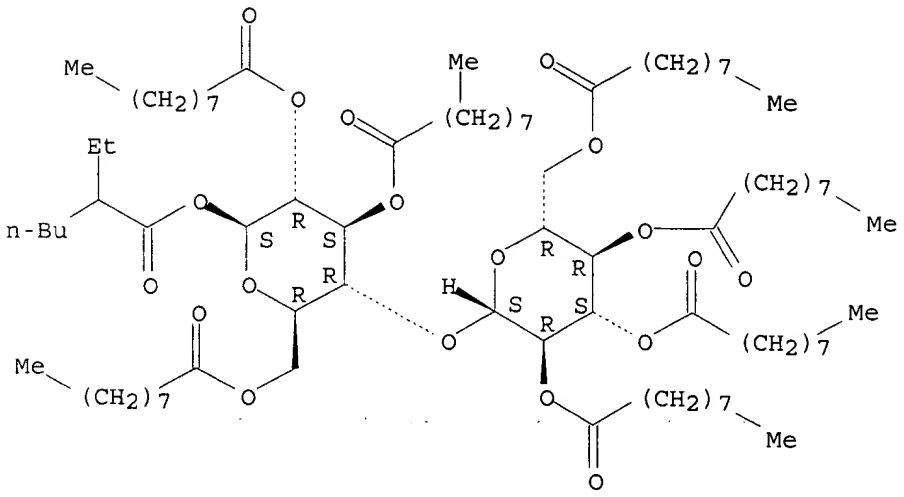
RN 415681-52-6 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) 1-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



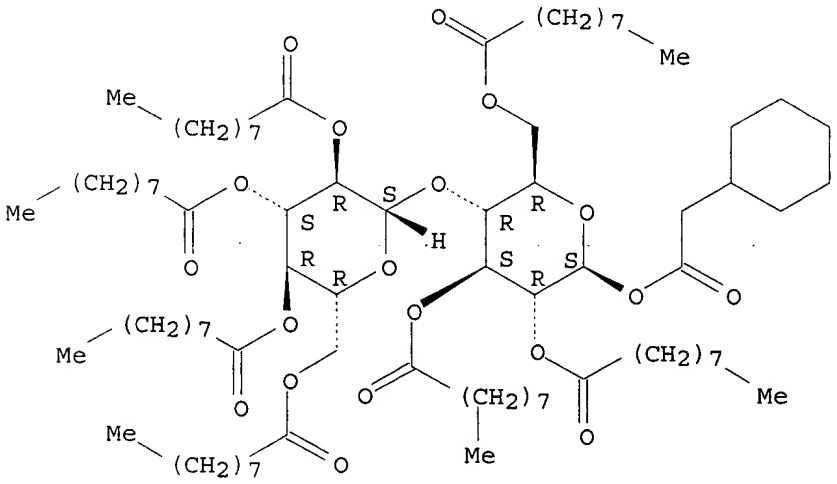
RN 415681-53-7 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-(2-ethylhexanoate) 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



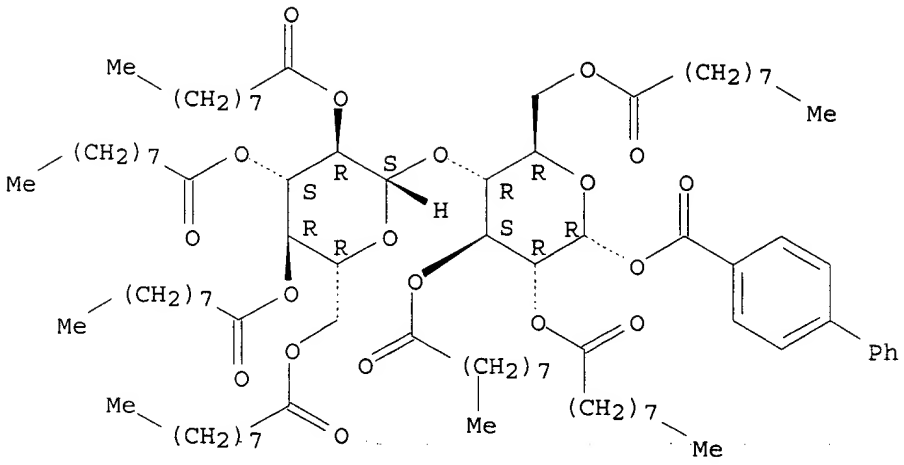
RN 415681-55-9 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-cyclohexaneacetate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



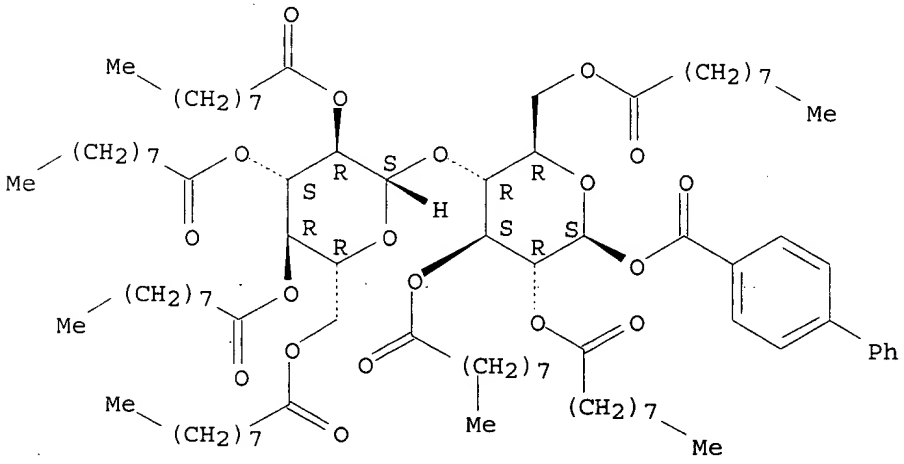
RN 415681-56-0 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-[1,1'-biphenyl]-4-carboxylate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



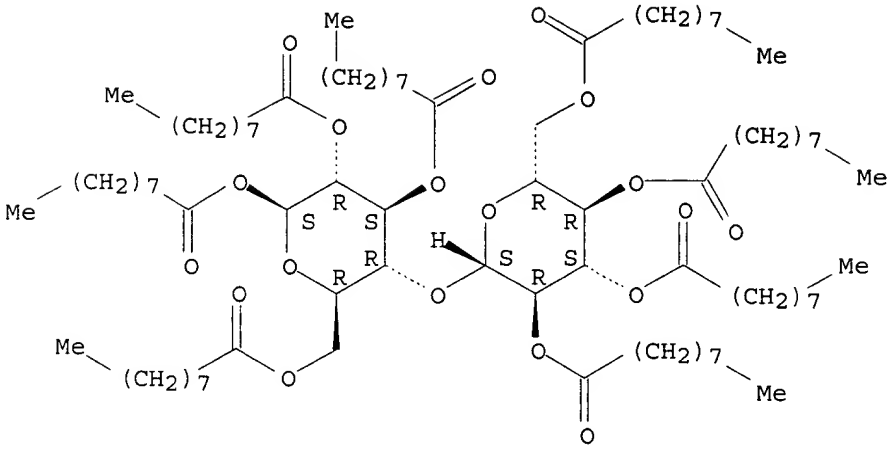
RN 415681-57-1 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, 1-[1,1'-biphenyl]-4-carboxylate 2,3,6-trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



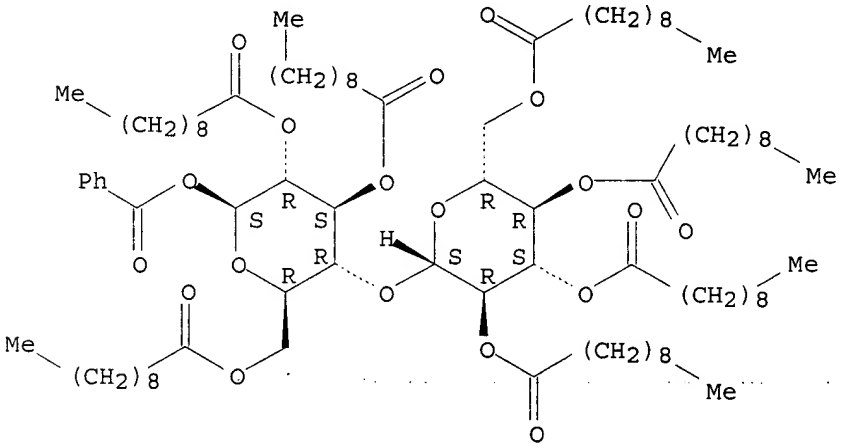
IT **139432-95-4P**, .beta.-Cellobiose octanonanoate **415681-40-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of cellobiose esters for use in cosmetics)
RN 139432-95-4 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 415681-40-2 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1-benzoate 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 4 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:314436 HCAPLUS
DOCUMENT NUMBER: 136:330337
TITLE: Cosmetic compositions containing cellobiose octanonanoate
INVENTOR(S): Grainger, Lynda; Gransden, Kathryn Elizabeth; Hopkinson, Andrew; Kowalski, Adam Jan; Webb, Nicholas; White, Miichael Stephen
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV
SOURCE: Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1199311	A1	20020424	EP 2001-307826	20010914
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2002076385	A1	20020620	US 2001-978954	20011017

PRIORITY APPLN. INFO.: GB 2000-25438 A 20001017
OTHER SOURCE(S): MARPAT 136:330337

AB Cellobiose esters and particularly .alpha.-cellobiose octanonanoate (I) has been found able to structure water-immiscible liqs. well, and in particular can produce clear structured emulsions. However, such emulsions tend to lose clarity or structural strength during storage. Deviating from I can result in impaired clarity and/or impaired hardness of emulsion sticks. However, acylated cellobiose which contains acyl substituents of formula -O-CO-R in which R represents an n-octyl residue and the percentage Y of the nonanoate acyl substituent -O-CO-R at the anomeric carbon is at least 60% and the percentage A of .alpha. anomer is greater than the .beta. anomer and not higher than A = 74.5 + 0.2Y when Y is up to 92% and not higher than A = 161 -0.74Y when Y is greater than 92% offers the prodn. of sticks combining structurant stability with product clarity and hardness. A clear emulsion stick contained cyclomethicone DC245 17.6, polydecene 26.4, acylated cellobiose (A = 95.1%, and Y = 98.1%) 5.0, cetyl dimethicone copolyol 1.0, zirconal-50 40.0, and glycerol 10.0%.

IC ICM C07H003-04
ICS C07H013-06; A61K007-32; A61K007-34; A61K007-38

CC 62-6 (Essential Oils and Cosmetics)

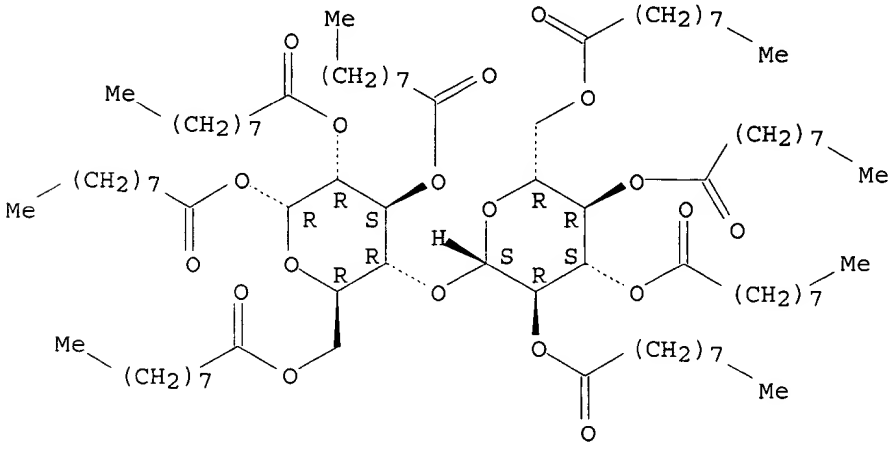
IT 1327-41-9, Aluminum chlorohydrate 1344-20-3, Aluminum zirconium chlorohydrate 134910-86-4, Zirconal-50 **172585-66-9**, .alpha.-Cellobiose octanonanoate
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(cosmetic compns. contg. cellobiose octanonanoate)

IT **172585-66-9**, .alpha.-Cellobiose octanonanoate
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(cosmetic compns. contg. cellobiose octanonanoate)

RN 172585-66-9 HCAPLUS

CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:171914 HCAPLUS
DOCUMENT NUMBER: 136:200415
TITLE: Methods of preparing disaccharide and trisaccharide C6-C12-fatty acid esters with high alpha content and materials therefrom
INVENTOR(S): Debenham, John S.; Buchanan, Charles M.; Wood, Matthew D.; Malcolm, Michael O.; Moore, Mary K.
PATENT ASSIGNEE(S): Eastman Chemical Company, USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

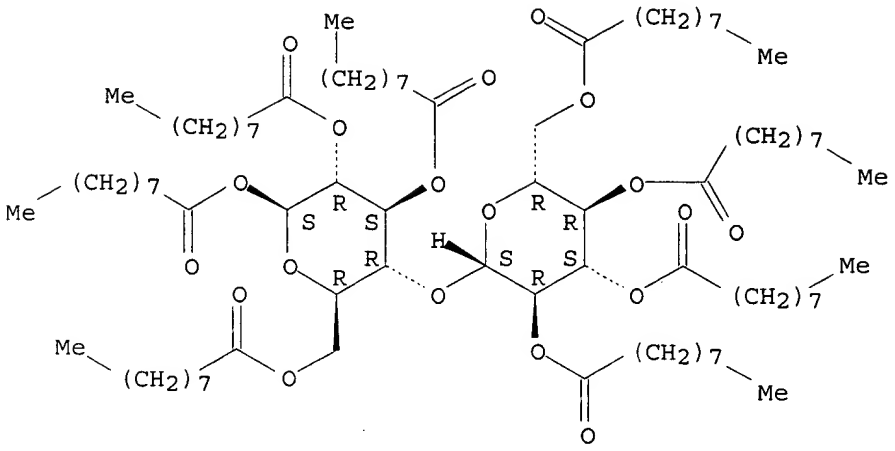
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002018400	A2	20020307	WO 2001-US26446	20010824
WO 2002018400	A3	20020926		
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US 2002103369	A1	20020801	US 2001-933409	20010820

PRIORITY APPLN. INFO.: US 2000-227990P P 20000825
US 2001-933409 A 20010820
OTHER SOURCE(S): CASREACT 136:200415

AB The present invention provides chem. processes for the prepn. of disaccharide and trisaccharide C6 to C12 fatty acid esters having a high alpha content. Yet still further, the invention provides materials prepd. by the processes disclosed herein. Thus, esterification of cellobiose with nonanoic anhydride in the presence of methanesulfonic acid gave 95% yield of cellobiose octanonanoate. HPLC anal. indicated that the alpha content of the product was 82%.

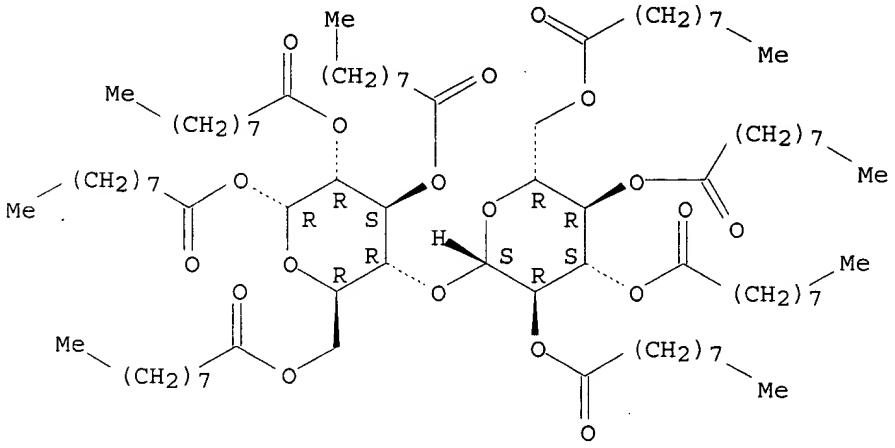
IC ICM C07G013-00
CC 33-4 (Carbohydrates)
Section cross-reference(s): 80
IT 3616-19-1P, Cellobiose octaacetate **139432-95-4P 172585-66-9P 401813-71-6P 401813-72-7P**
RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(methods of prepg. disaccharide and trisaccharide C6-C12-fatty acid esters via stereoselective esterification with high alpha content)
IT **139432-95-4P 172585-66-9P 401813-71-6P 401813-72-7P**
RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(methods of prepg. disaccharide and trisaccharide C6-C12-fatty acid esters via stereoselective esterification with high alpha content)
RN 139432-95-4 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetrananonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



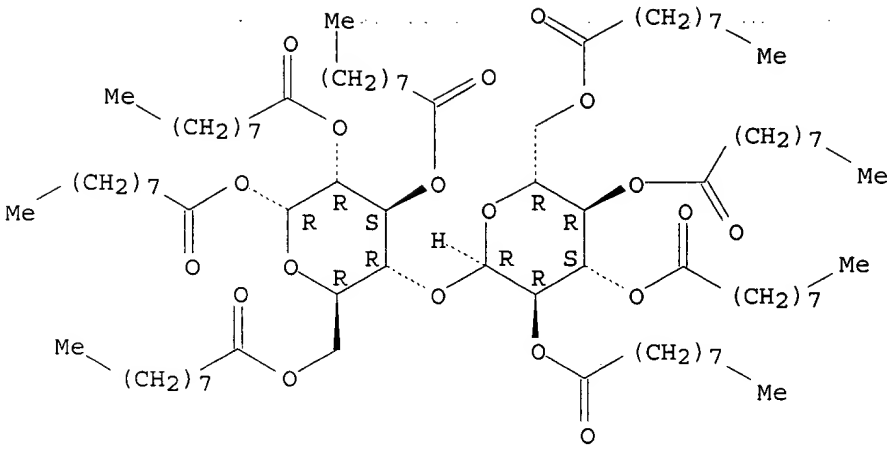
RN 172585-66-9 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



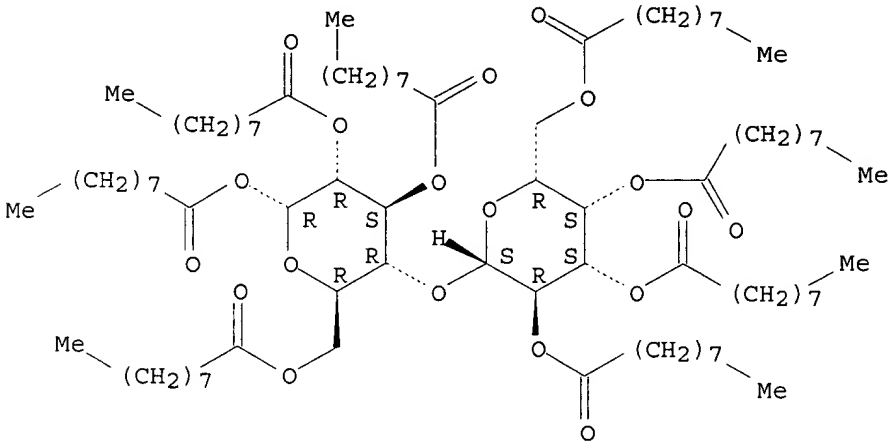
RN 401813-71-6 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.alpha.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 401813-72-7 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-galactopyranosyl]-, tetrananoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 6 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:741875 HCAPLUS
DOCUMENT NUMBER: 133:313389
TITLE: Antiperspirant compositions
INVENTOR(S): Esser, Isabelle Claire Helene Marie; Franklin, Kevin Ronald; Grainger, Lynda; Kowalski, Adam Jan; Rowe, Kathryn Elizabeth
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV; Hindustan Lever Limited
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2000061094	A1	20001019	WO 2000-GB1230	20000331	
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
BR 2000009697	A	20020102	BR 2000-9697	20000331	
EP 1169014	A1	20020109	EP 2000-920859	20000331	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
US 6241976	B1	20010605	US 2000-547445	20000412	
PRIORITY APPLN. INFO.:			GB 1999-8223	A 19990412	
			WO 2000-GB1230	W 20000331	

AB An antiperspirant compn. is a structured emulsion of a continuous phase contg. water-immiscible liq. carrier plus a structurant, and a disperse phase which is a soln. of antiperspirant active in water or a mixt. of water and water-sol. solvent. The structurant is a fully or partially esterified saccharide. The compns. give low visible residue when applied to skin or to clothing. A compn. was prepd. contg. Cyclomethicone DC 245 18, Polydecene 22.75, Finsolv TN 13.3, isostearyl alc. 12, N-lauryl-L-glutamic acid dibutylamide 4, Cetyl Dimethicone Copolyol 1, and Zirconal 50 40 parts by wt.

IC ICM A61K007-32

CC 62-4 (Essential Oils and Cosmetics)

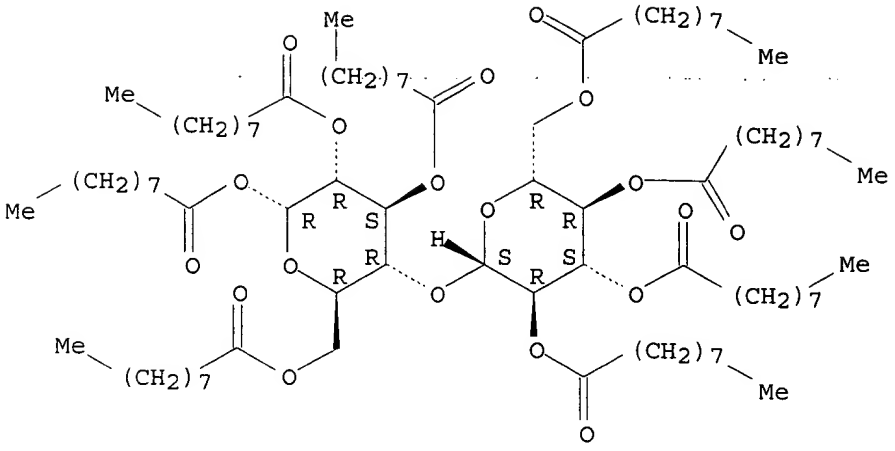
IT 145686-34-6P, Cetyl dimethicone copolyol **172585-66-9P**, .alpha.-Cellobiose octanonanoate **172585-67-0P**, .alpha.-Cellobiose octadecanoate
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antiperspirant compns. contg. esterified saccharide structurants)

IT **172585-66-9P**, .alpha.-Cellobiose octanonanoate
172585-67-0P, .alpha.-Cellobiose octadecanoate
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antiperspirant compns. contg. esterified saccharide structurants)

RN 172585-66-9 HCAPLUS

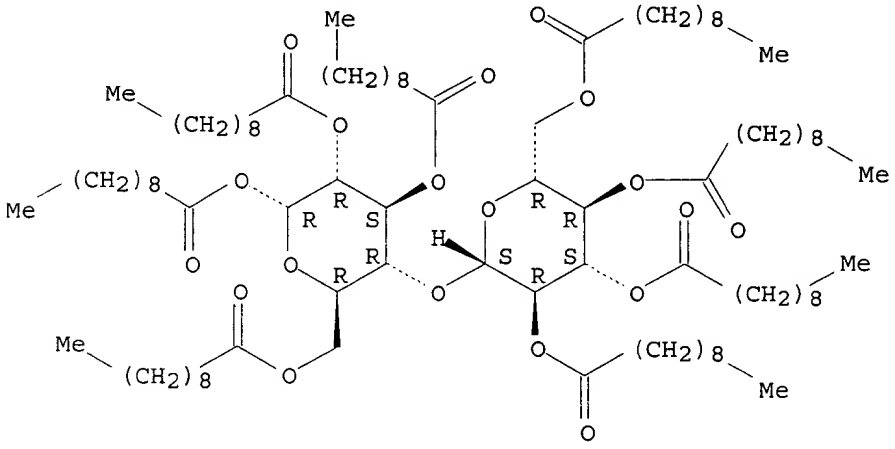
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 172585-67-0 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:741865 HCAPLUS
DOCUMENT NUMBER: 133:313387
TITLE: Cosmetic structured emulsion compositions
INVENTOR(S): Franklin, Kevin Ronald; Hopkinson, Andrew
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N.V.; Hindustan Lever Limited
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

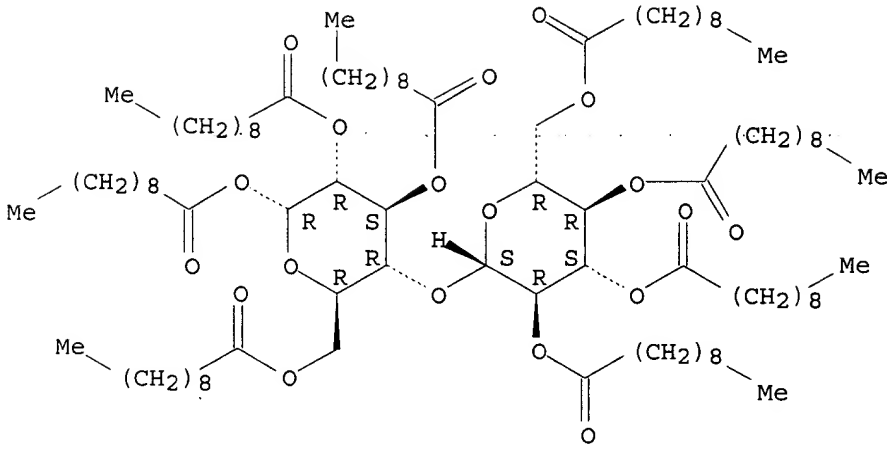
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000061081	A2	20001019	WO 2000-GB1236	20000331
WO 2000061081	A3	20020110		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1187597	A2	20020320	EP 2000-918999	20000331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000009748	A	20020416	BR 2000-9748	20000331
US 6455056	B1	20020924	US 2000-547804	20000411
US 2001055574	A1	20011227	US 2000-548309	20000412
US 6426060	B2	20020730		

PRIORITY APPLN. INFO.: GB 1999-8212 A 19990412
WO 2000-GB1236 W 20000331

AB A cosmetic compn. is a structured emulsion of a continuous phase contg. water-immiscible liq. carrier plus a structurant, and a disperse phase which is a soln. of antiperspirant active in a more polar, probably aq., solvent. The structurant is a material which forms a network of fibers in the continuous phase, thereby gelling it. The structurant has an enthalpy of gelation in the carrier liq. or a test liq. with a magnitude of at least 30 kJ/mol. This min. enthalpy of gelation facilitates processing at conveniently accessible temps. and promotes stability. The enthalpy of gelation was detd. for a no. of structureing agents such as .alpha.-cellobiose esters in 3 liqs. Antiperspirant compns. were given.

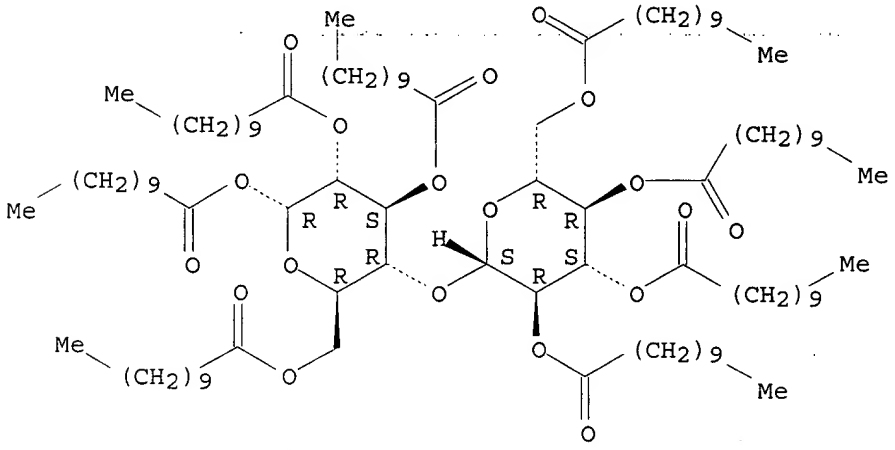
IC ICM A61K007-00
CC 62-4 (Essential Oils and Cosmetics)
IT **172585-67-0**, .alpha.-Cellobiose octadecanoate **172585-68-1**
, .alpha.-Cellobiose octaundecanoate **301684-31-1**
301684-34-4
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(cosmetic structured emulsion compns.)
IT 79-63-0P, Lanosterol 83-46-5P, .beta.-Sitosterol 106-14-9P, 12-Hydroxystearic acid 12738-23-7P, Oryzanol 63663-21-8P, GP-1
172585-65-8P, .alpha.-Cellobiose octaoctanoate
172585-66-9P, .alpha.-Cellobiose octanonanoate
RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cosmetic structured emulsion compns.)
IT **172585-67-0**, .alpha.-Cellobiose octadecanoate **172585-68-1**
, .alpha.-Cellobiose octaundecanoate **301684-31-1**
301684-34-4
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(cosmetic structured emulsion compns.)
RN 172585-67-0 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



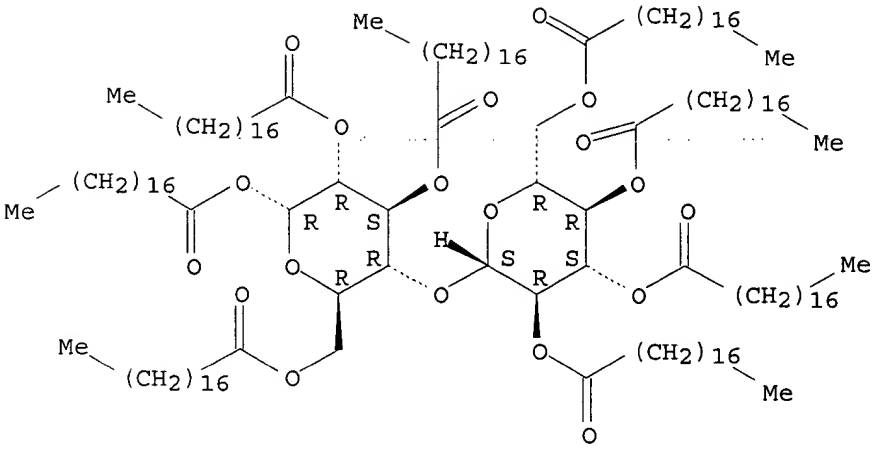
RN 172585-68-1 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



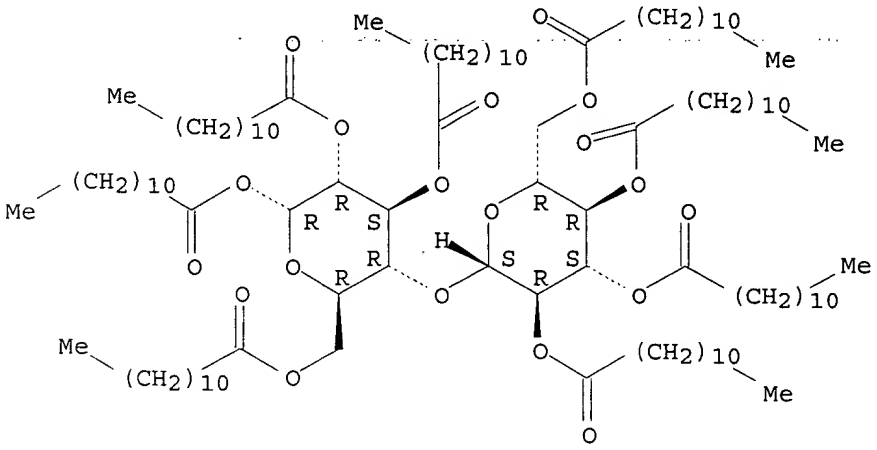
RN 301684-31-1 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-glucopyranosyl]-, tetraoctadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



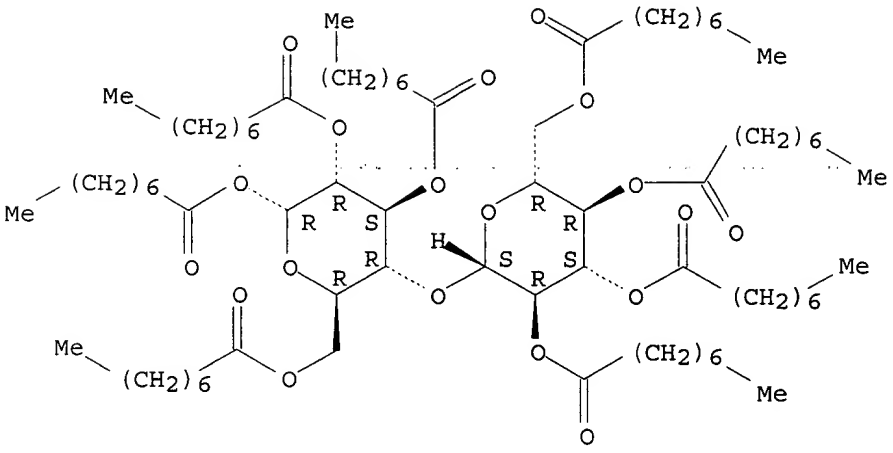
RN 301684-34-4 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tetradodecannaote (9CI) (CA INDEX NAME)

Absolute stereochemistry.



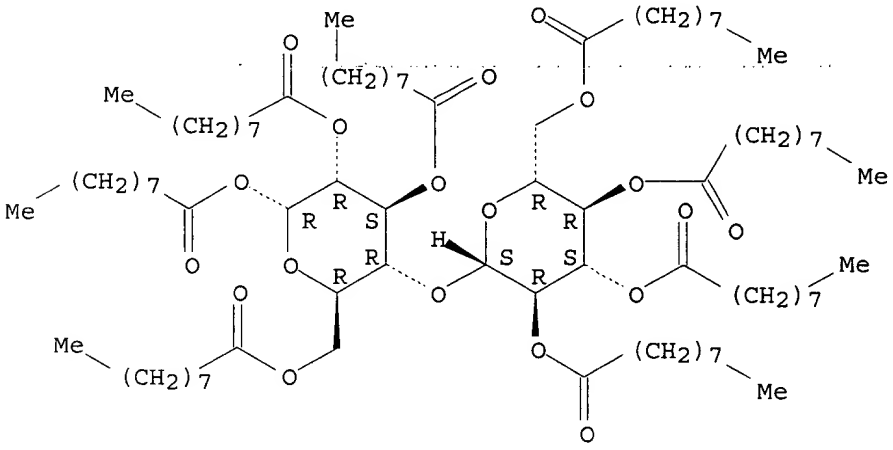
IT **172585-65-8P**, .alpha.-Cellobiose octaoctanoate
172585-66-9P, .alpha.-Cellobiose octanonanoate
RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cosmetic structured emulsion compns.)
RN 172585-65-8 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 172585-66-9 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 8 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:741864 HCAPLUS
DOCUMENT NUMBER: 133:313386
TITLE: Cosmetic compositions containing saccharide ester structurants
INVENTOR(S): Franklin, Kevin Ronald; Hopkinson, Andrew
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV; Hindustan Lever Limited
SOURCE: PCT Int. Appl., 102 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

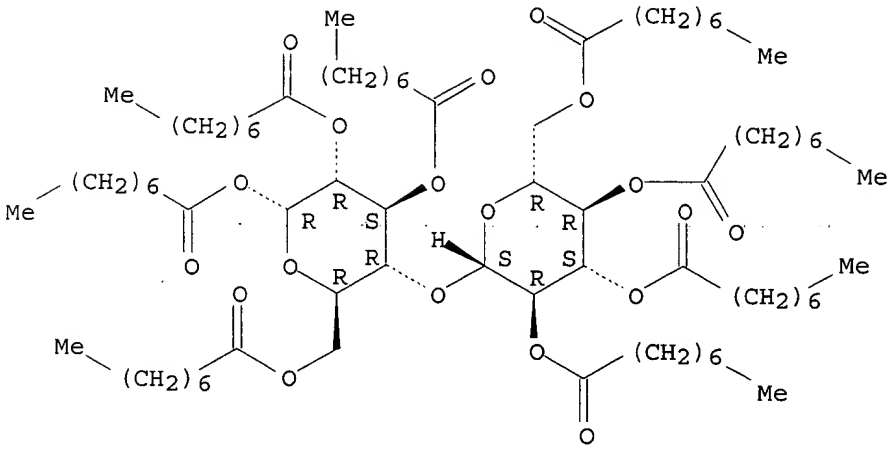
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2000061080 A2 20001019 WO 2000-GB1235 20000331
WO 2000061080 A3 20010503
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1175199 A2 20020130 EP 2000-918998 20000331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
US 6455056 B1 20020924 US 2000-547804 20000411
US 2001055574 A1 20011227 US 2000-548309 20000412
US 6426060 B2 20020730
PRIORITY APPLN. INFO.: GB 1999-8212 A 19990412
WO 2000-GB1235 W 20000331

AB A cosmetic compn. contains a water-immiscible carrier liq. and a structurant therefor which is effective to gel the compn. upon cooling from a temp. at which the structurant is a mobile soln. in the carrier liq. The carrier liq. may serve as a continuous phase in which a solid or liq. disperse phase is suspended. The structurant is a fully or partially esterified saccharide which contains no more than eight monosaccharide residues and has an enthalpy of gelation in the carrier liq. with a magnitude of at least 45 kJ/mol. This min. enthalpy of gelation facilitates processing at conveniently accessible temps. and promotes stability. The enthalpy of gelation for a no. of .alpha.-cellobiose esters was given and cosmetic gel formulations given.

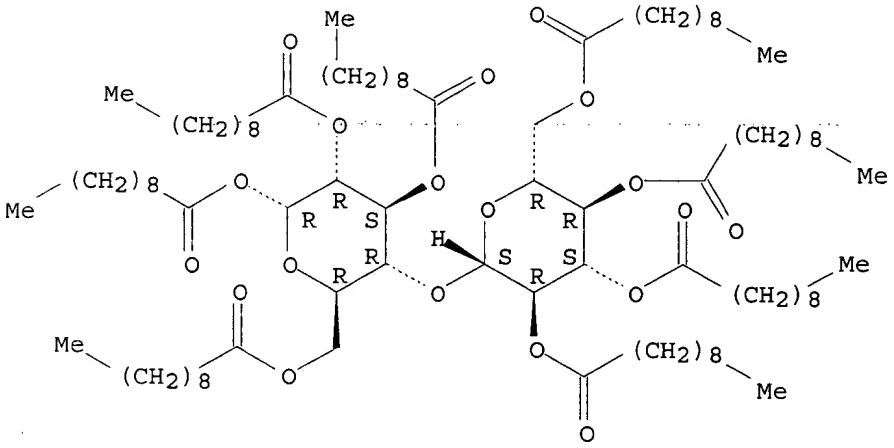
IC ICM A61K007-00
CC 62-4 (Essential Oils and Cosmetics)
IT 79-63-0, Lanosterol 83-46-5, .beta.-Sitosterol 106-14-9, 12-Hydroxystearic acid 12738-23-7, Oryzanol 63663-21-8
172585-65-8, .alpha.-Cellobiose octaoctanoate **172585-67-0**
172585-68-1, .alpha.-Cellobiose octaundecanoate
301684-31-1 301684-34-4
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(cosmetic compns. contg. saccharide ester structurants)
IT **172585-66-9P**, .alpha.-Cellobiose octanonanoate
RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cosmetic compns. contg. saccharide ester structurants)
IT **172585-65-8**, .alpha.-Cellobiose octaoctanoate **172585-67-0**
172585-68-1, .alpha.-Cellobiose octaundecanoate
301684-31-1 301684-34-4
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(cosmetic compns. contg. saccharide ester structurants)
RN 172585-65-8 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



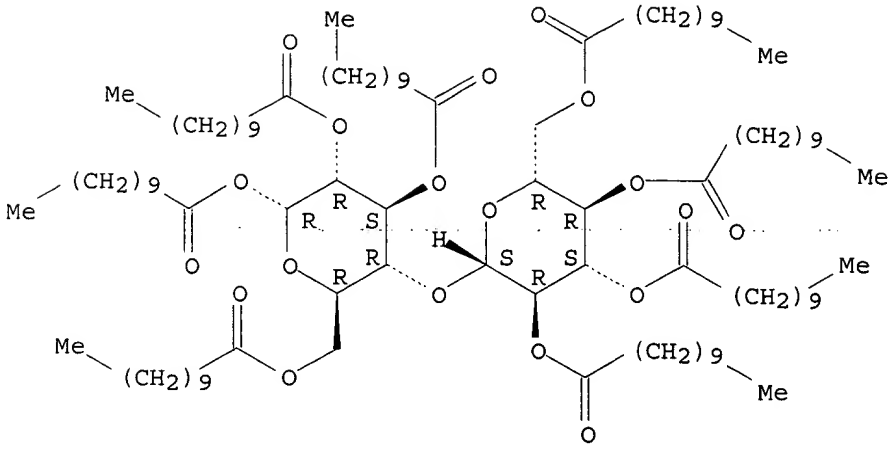
RN 172585-67-0 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



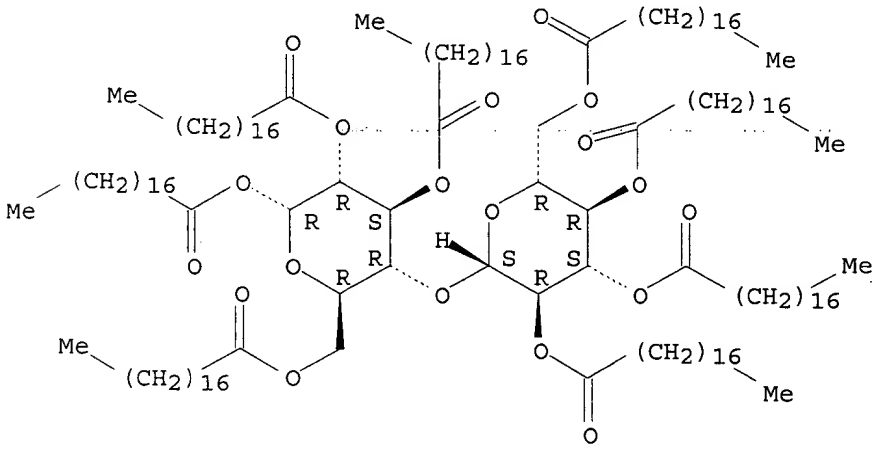
RN 172585-68-1 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



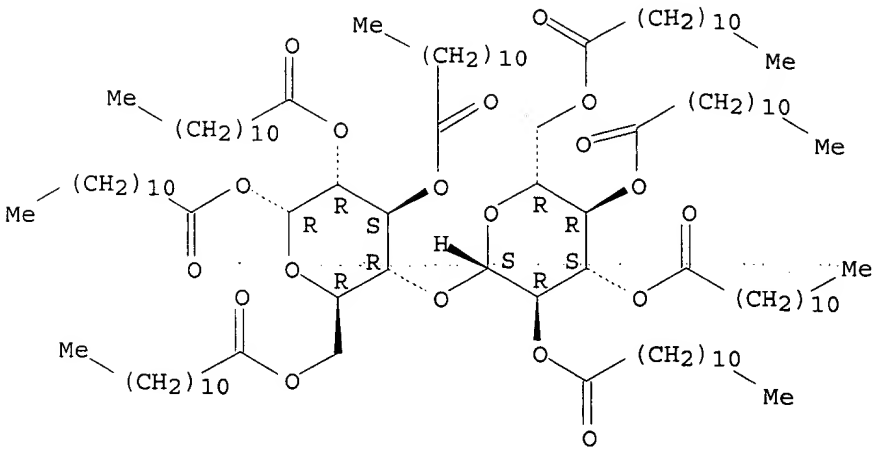
RN 301684-31-1 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-glucopyranosyl]-, tetraoctadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



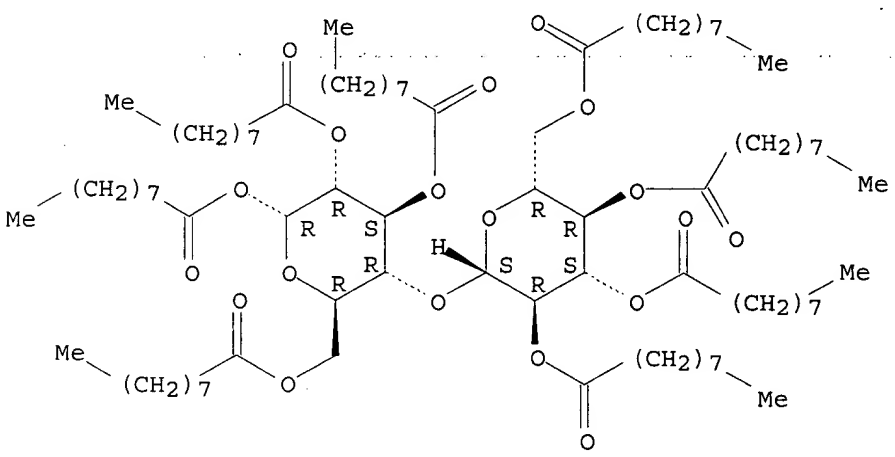
RN 301684-34-4 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tetradodecannaote (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **172585-66-9P**, .alpha.-Cellobiose octanonanoate
RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cosmetic compns. contg. saccharide ester structurants)
RN 172585-66-9 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 9 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:741863 HCAPLUS
DOCUMENT NUMBER: 133:313385
TITLE: Cosmetic compositions containing cellobiose ester structurants
INVENTOR(S): Franklin, Kevin Ronald; Kowalski, Adam Jan; Parrot, David Terence; Rowe, Kathryn Elizabeth; White, Michael Stephen
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N.V.; Hindustan Lever Limited
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000061079	A2	20001019	WO 2000-GB1228	20000331
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
BR 2000009698	A	20020102	BR 2000-9698	20000331
EP 1171086	A2	20020116	EP 2000-918996	20000331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6248312	B1	20010619	US 2000-548310	20000412
US 2001033851	A1	20011025	US 2001-826494	20010404
US 6458344	B2	20021001		

PRIORITY APPLN. INFO.: GB 1999-8202 A 19990412
WO 2000-GB1228 W 20000331
US 2000-548310 A3 20000412

OTHER SOURCE(S): MARPAT 133:313385

AB A cosmetic compn. preferably an antiperspirant compn., in solid or soft-solid form has a continuous phase which contains a water-immiscible liq. carrier and also contains a structurant which is partially or fully esterified cellobiose. A no. of cellobiose esters were prepd. including the nonanoate and decanoate and a no. of cosmetic formulations given including antiperspirants.

IC ICM A61K007-00

CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 33

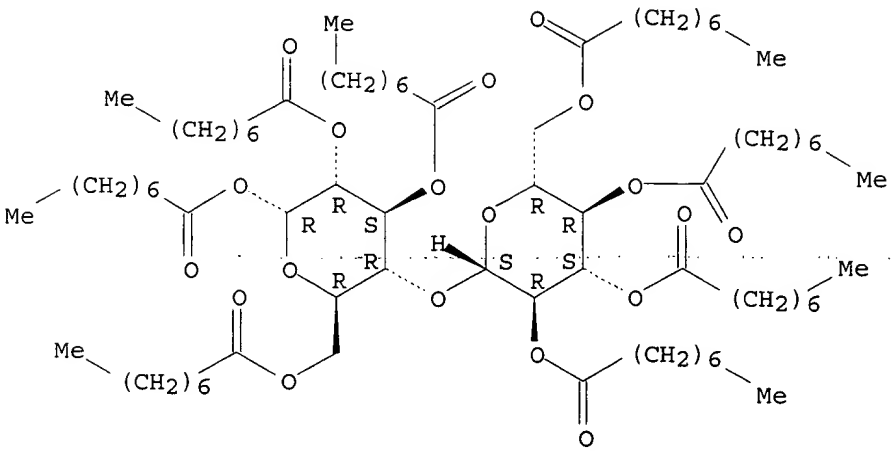
IT **172585-65-8P**, .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate **172585-66-9P**, .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate **172585-67-0P** **172585-68-1P**, .alpha.-Cellobiose octaundecanoate **301684-31-1P** **301684-34-4P** **301807-45-4P** **301807-46-5P**
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cosmetic compns. contg. cellobiose ester structurants)

IT **172585-65-8P**, .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate **172585-66-9P**, .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate **172585-67-0P** **172585-68-1P**, .alpha.-Cellobiose octaundecanoate **301684-31-1P** **301684-34-4P** **301807-45-4P** **301807-46-5P**
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cosmetic compns. contg. cellobiose ester structurants)

RN 172585-65-8 HCAPLUS

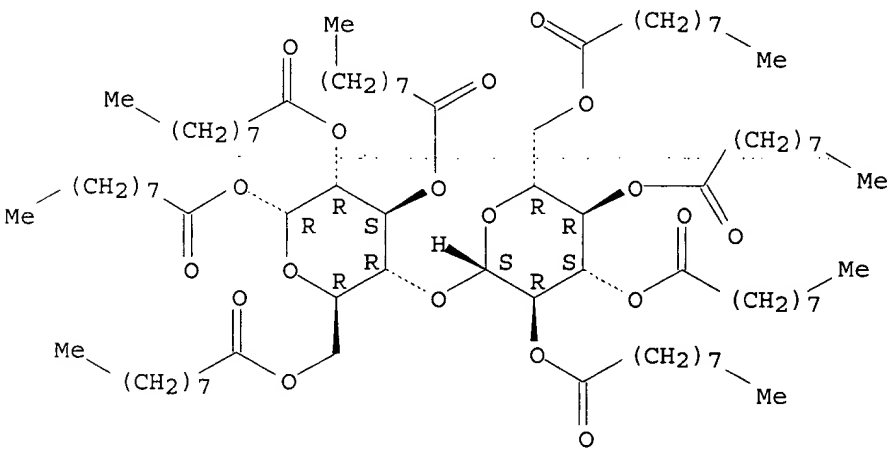
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



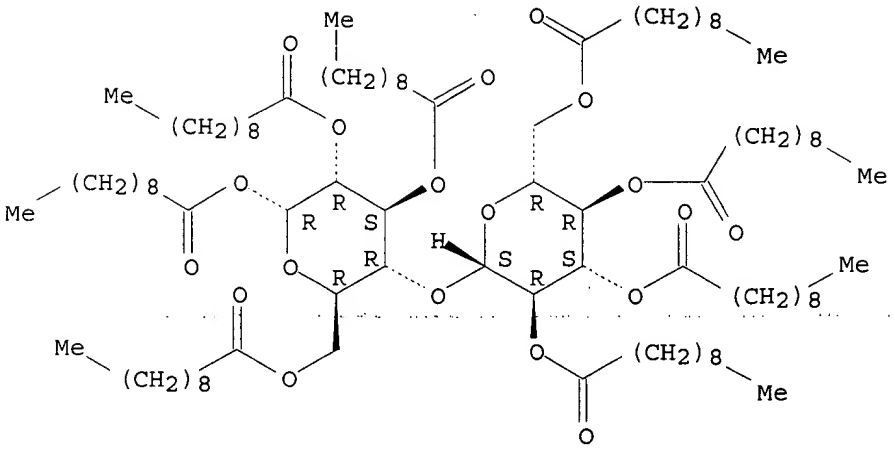
RN 172585-66-9 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



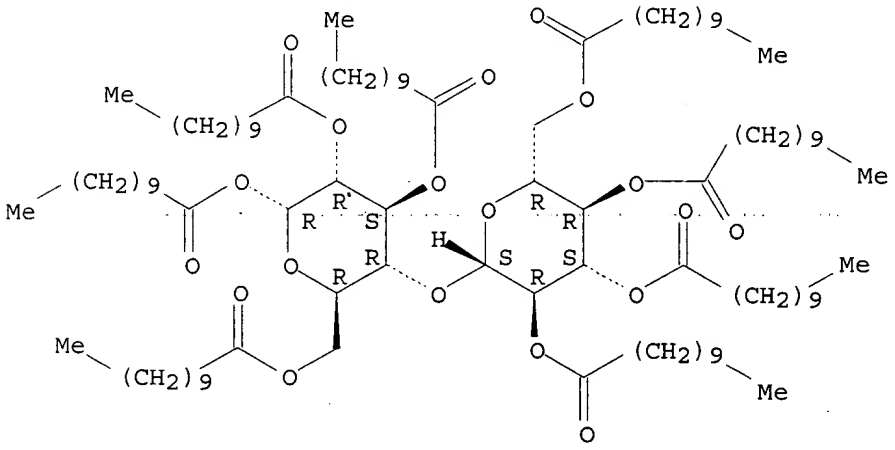
RN 172585-67-0 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



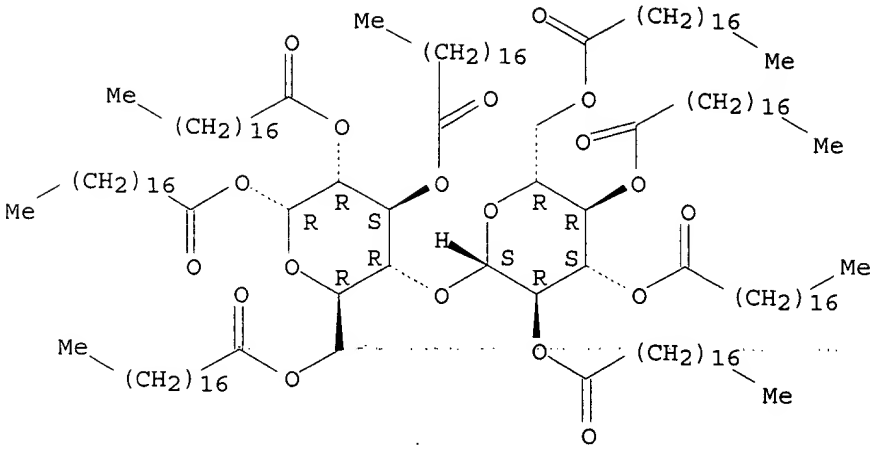
RN 172585-68-1 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



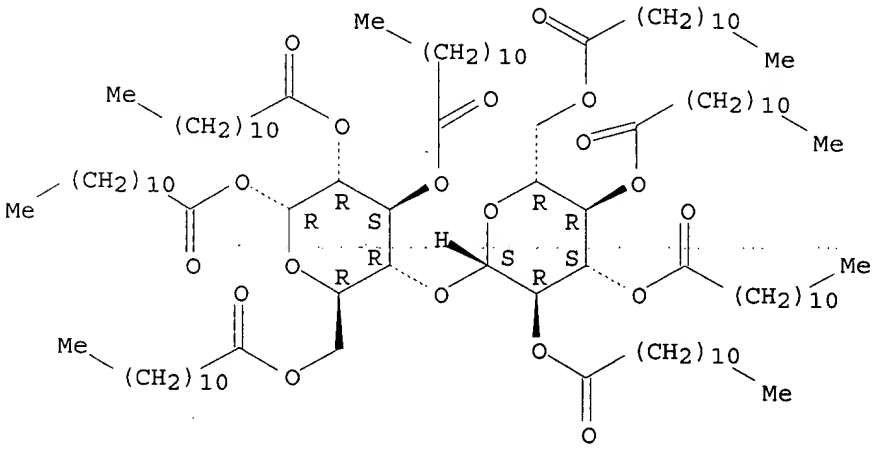
RN 301684-31-1 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-glucopyranosyl]-, tetraoctadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



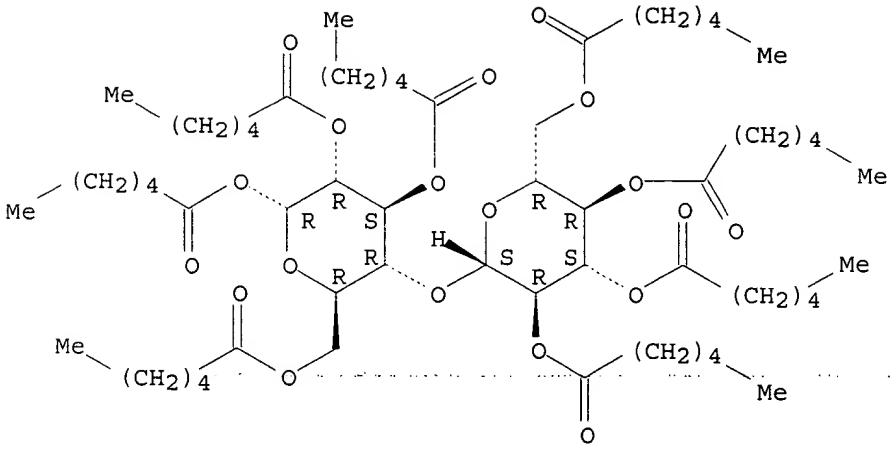
RN 301684-34-4 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tetradodecannaote (9CI) (CA INDEX NAME)

Absolute stereochemistry.



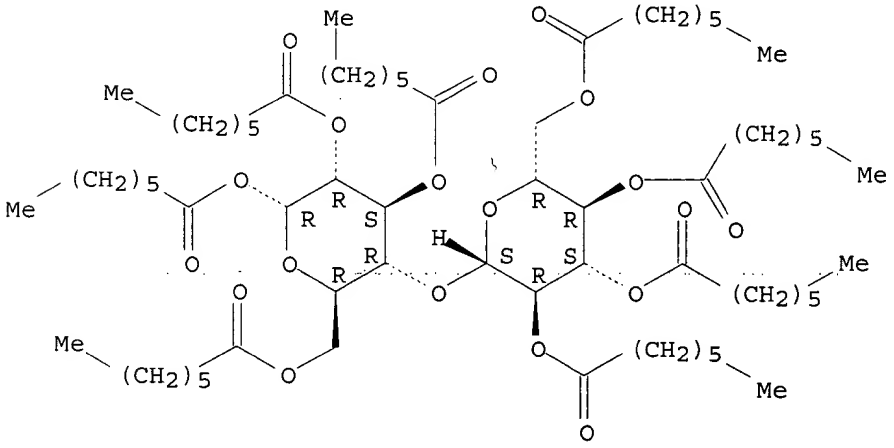
RN 301807-45-4 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxohexyl)-.beta.-D-glucopyranosyl]-, tetrahexanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 301807-46-5 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoheptyl)-.beta.-D-glucopyranosyl]-, tetraheptanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 10 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:468460 HCAPLUS
DOCUMENT NUMBER: 131:92545
TITLE: Carbohydrates, useful in solid delivery systems
INVENTOR(S): Blair, Julian Alexander
PATENT ASSIGNEE(S): Quadrant Holdings Cambridge Limited, UK
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9933853	A2	19990708	WO 1998-GB3888	19981223

WO 9933853 A3 19990930
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 6352722 B1 20020305 US 1998-218845 19981222
ZA 9811843 A 19990624 ZA 1998-11843 19981223
CA 2316275 AA 19990708 CA 1998-2316275 19981223
AU 9920629 A1 19990719 AU 1999-20629 19981223
EP 1042339 A2 20001011 EP 1998-965297 19981223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
JP 2001527087 T2 20011225 JP 2000-526529 19981223
US 2002058067 A1 20020516 US 2001-4481 20011101
PRIORITY APPLN. INFO.: US 1997-68754P P 19971223
US 1998-218845 A1 19981222
WO 1998-GB3888 W 19981223
OTHER SOURCE(S): MARPAT 131:92545

AB Derivatized carbohydrates are provided which can be used to form a variety of materials including solid delivery systems. The derivatized carbohydrates are generally carbohydrates, wherein at least a portion of the hydroxyl groups on the carbohydrate are substituted with a branched hydrophobic chain, such as a hydrocarbon chain, via, for example, an ether or ester linkage. The solid delivery systems can be used for delivery and release of a variety of substances, and are, e.g., in the form of tablets or powders for oral administration, microspheres or implants for i.v., intradermal, transdermal, pulmonary or other routes of administration. The derivatized carbohydrates may be processed to form a solid matrix having a substance, such as a therapeutic agent, incorporated therein. The solid matrix is provided in a solid dose form which is capable of releasing a therapeutic substance in situ at various controlled rates. Thus, a model drug diltiazem-HCl was incorporated into solid vehicles of the straight-chain trehalose octacetate or the branched-chain trehalose octa-3,3-dimethylbutyrate and trehalose octapivalate as well as composite formulations of the 2 carbohydrates. The drug release was much slower from the branched-chain carbohydrate formulation than from the straight-chain formulation.

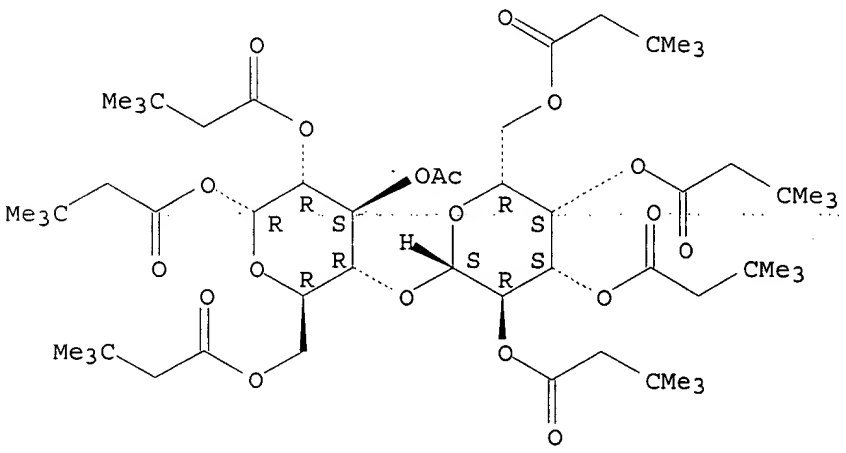
IC ICM C07H015-12
ICS C07H003-04
CC 63-6 (Pharmaceuticals)

IT 5346-90-7, .alpha.-Cellobiose octaacetate 6291-42-5, .beta.-Lactose octaacetate 20764-63-0, .beta.-Cellobiose octaacetate 30021-60-4 34213-32-6, .alpha.-Lactose octaacetate 52554-32-2 107243-31-2 118649-02-8 129728-03-6 177327-93-4, Trehalose octapropionate 177472-68-3 190323-37-6 210051-48-2 210100-67-7 229962-35-0 **229962-37-2** 229962-38-3 229962-40-7 229962-42-9 229962-44-1 229962-45-2 229962-46-3 229962-48-5 229962-49-6 229962-50-9 229962-51-0 229962-52-1 229962-55-4 229966-88-5 229966-90-9 229966-91-0 229966-92-1 229966-93-2 229966-94-3
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carbohydrates in solid delivery systems)

IT **229962-37-2**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(carbohydrates in solid delivery systems)
RN 229962-37-2 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(3,3-dimethyl-1-oxobutyl)-.beta.-D-galactopyranosyl]-, 3-acetate 1,2,6-tris(3,3-dimethylbutanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 11 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:630199 HCAPLUS
DOCUMENT NUMBER: 129:296458
TITLE: Carbon-13 NMR Investigations of the Orientational Order in a Columnar Liquid Crystal
AUTHOR(S): Huang, Zhi; Sandstroem, Dick; Henriksson, Ulf; Maliniak, Arnold
CORPORATE SOURCE: Division of Physical Chemistry Arrhenius Laboratory, Stockholm University, Stockholm, S-106 91, Swed.
SOURCE: Journal of Physical Chemistry B (1998), 102(43), 8395-8399
CODEN: JPCBFK; ISSN: 1089-5647
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A natural abundance C-13 NMR study of benzene dissolved in a columnar liq. crystal formed by the carbohydrate mesogen octa-O-decanoyl-.beta.-cellobiose (Cel-II-10) is reported. The alignment of the mesophase in the magnetic field is sensitive to the field strength and to the thermal history of the sample. From C-13 line shapes, the director distribution functions and the mol. order parameter of the solute were estd. In contrast to most columnar phases, Cel-II-10 aligns parallel to the magnetic field. The orientational order parameter of benzene is pos., which is expected for a columnar liq. crystal where the symmetry axis of the disk is aligned parallel to the column axis. However, an unexpected increase of the order parameter with increased temp. was obsd. This behavior is probably a consequence of an exchange process between different solvation sites in the columnar mesophase and indicates that the population in the environment with higher order parameter increases when the sample is heated.
CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 77
IT 71-43-2, Benzene, properties **139559-65-2**, Octa-O-decanoyl-.beta.-

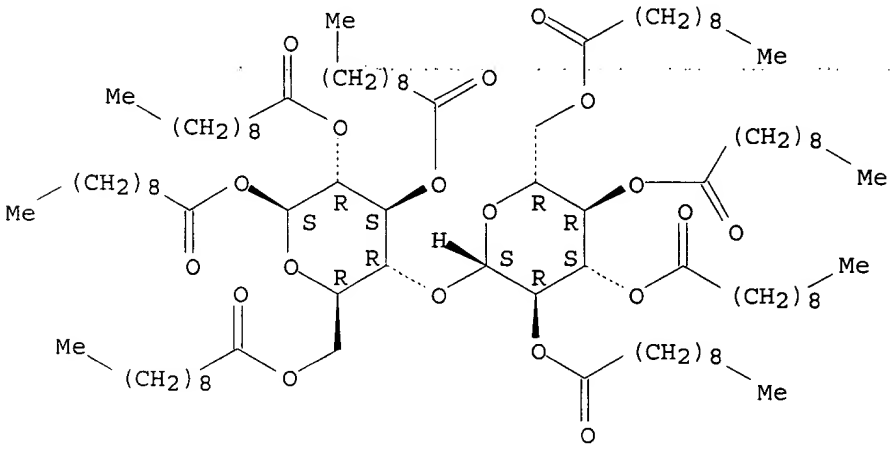
cellobiose
RL: PRP (Properties)
(carbon-13 NMR investigations of orientational order of benzene in columnar liq. crystal)

IT **139559-65-2**, Octa-O-decanoyl-.beta.-cellobiose
RL: PRP (Properties)
(carbon-13 NMR investigations of orientational order of benzene in columnar liq. crystal)

RN 139559-65-2 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:605353 HCAPLUS

DOCUMENT NUMBER: 129:303032

TITLE: Thermotropic liquid crystalline poly(vinyl ether)s with pendant cellobiose residues. Synthesis and mesophase structure

AUTHOR(S): Takaragi, Akira; Miyamoto, Takeaki; Minoda, Masahiko; Watanabe, Junji

CORPORATE SOURCE: Institute Chemical Research, Kyoto University, Uji, 611, Japan

SOURCE: Macromolecular Chemistry and Physics (1998), 199(9), 2071-2077
CODEN: MCHPES; ISSN: 1022-1352

PUBLISHER: Huethig & Wepf Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis of poly(vinyl ether)s (VEs) is described carrying pendant cellobiose heptadecanoate (CHD) residues and their mesomorphic properties were examd. by DSC, polarization microscopy and x-ray diffraction. The poly(VE)s were synthesized through cationic polymn. of a CHD-substituted VE, i.e., 10-(vinyloxy)decyl-2,2',3,3',4',6,6'-hepta-O-decanoyl-.beta.-D-cellobioside. From x-ray diffraction analyses, the mesophase at the poly(VE) proved to be closely similar to that of the star-shaped triplet deriv. The mesophase is characterized by the following features: it consists of discotic columns built up by a regular stacking of the pendant

CHD residues, each polymer main chain is presumed to have an extended conformation due to the periodic stacking of the pendant CHD moieties into a columnar structure, and each polymer mol. independently forms 3 discotic columns, which surround the main chain, without any intercalation of the CHD pendants originating from different polymer mols.

CC 36-2 (Physical Properties of Synthetic High Polymers)
Section cross-reference(s): 75

IT **214343-21-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(monomer; prepn. and polymn. of cellobiose-contg. vinyl ether)

IT **139559-65-2**
RL: PRP (Properties)
(prepn. and cryst. properties of poly(vinyl ether) carrying pendant cellobiose heptadecanoate)

IT **214343-22-3P** 214404-55-4P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cryst. properties of poly(vinyl ether) carrying pendant cellobiose heptadecanoate)

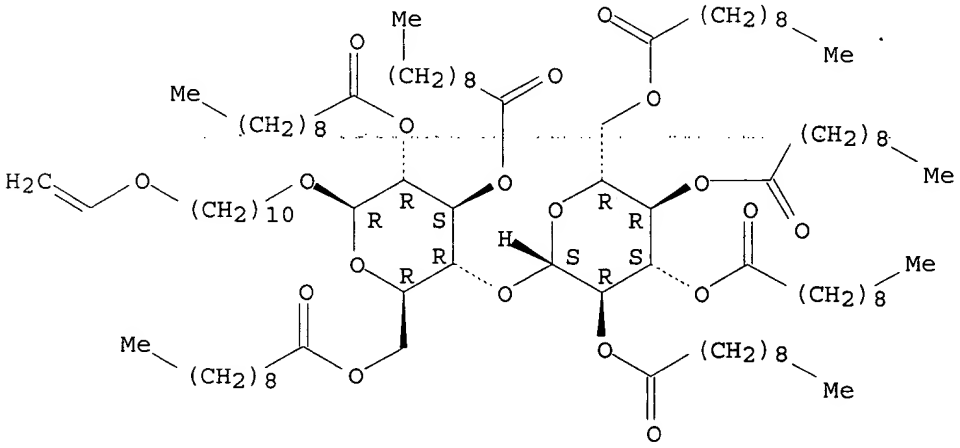
IT 110-75-8, 2-Chloroethyl vinyl ether **196098-40-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and polymn. of cellobiose-contg. vinyl ether monomer)

IT **214343-21-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(monomer; prepn. and polymn. of cellobiose-contg. vinyl ether)

RN 214343-21-2 HCAPLUS

CN .beta.-D-Glucopyranoside, 10-(ethenyloxy)decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

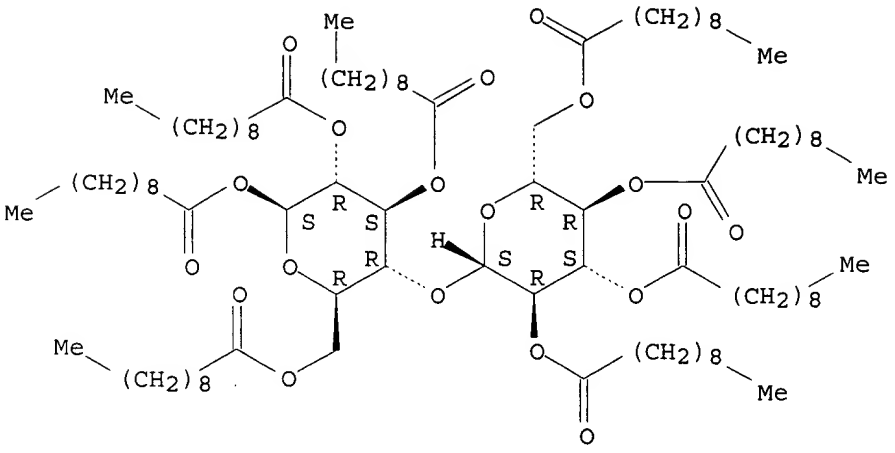


IT **139559-65-2**
RL: PRP (Properties)
(prepn. and cryst. properties of poly(vinyl ether) carrying pendant cellobiose heptadecanoate)

RN 139559-65-2 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

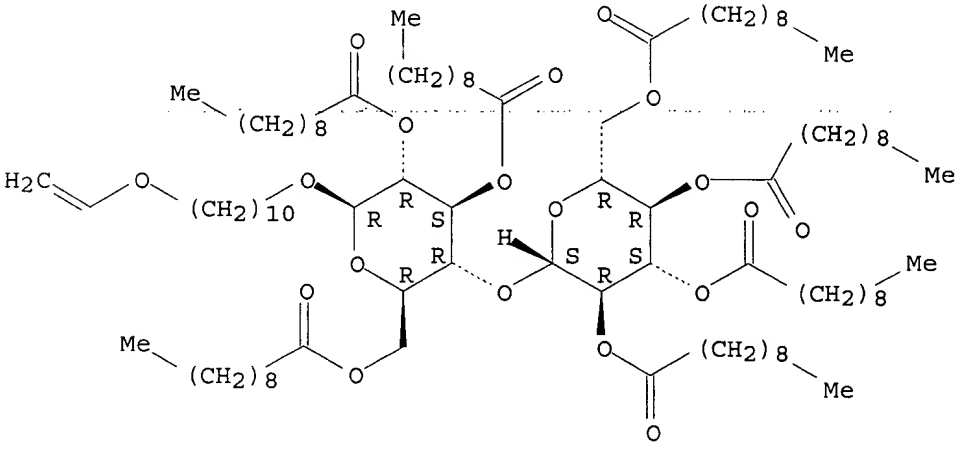


IT **214343-22-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cryst. properties of poly(vinyl ether) carrying pendant cellobiose heptadecanoate)
RN 214343-22-3 HCAPLUS
CN .beta.-D-Glucopyranoside, 10-(ethenyloxy)decyl 2,3,6-tris-O-(1-oxodecyl)-4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

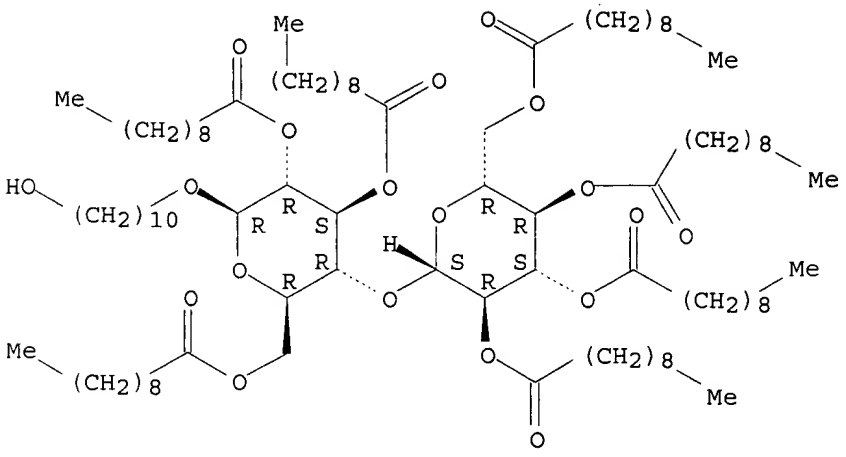
CRN 214343-21-2
CMF C94 H170 O19

Absolute stereochemistry.



IT **196098-40-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and polymn. of cellobiose-contg. vinyl ether monomer)
RN 196098-40-5 HCAPLUS
CN .beta.-D-Glucopyranoside, 10-hydroxydecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 13 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:373033 HCAPLUS
DOCUMENT NUMBER: 129:41576
TITLE: Synthesis and thermal properties of liquid crystalline side-chain polymers with pendant cellobiose residues
AUTHOR(S): Takaragi, Akira; Minoda, Masahiko; Miyamoto, Takeaki; Watanabe, Junji
CORPORATE SOURCE: Institute Chemical Research, Kyoto University, Uji, 611, Japan
SOURCE: Macromolecular Chemistry and Physics (1998), 199(6), 1119-1126
CODEN: MCHPES; ISSN: 1022-1352
PUBLISHER: Huethig & Wepf Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Two series of thermotropic polymethacrylate (PM) samples with pendant cellobiose residues and an alkyl spacer (no. of C atoms n = 4 and 10) were synthesized, and their mesomorphic properties were investigated to elucidate the function of acylated cellobiose moieties as discotic mesogens by differential scanning calorimetry (DSC), polarization microscopy, and x-ray diffraction. The PM-4 samples with a short spacer showed 2 kinds of mesophases in a wide temp. region up to the degrdn. temp. of the sample, i.e., .apprxeq.230.degree., whereas the PM-10 samples with a long spacer showed a single mesophase between 45-135.degree.. X-ray diffraction data suggested that both the mesophases formed by PM-4 and PM-10 belong to a kind of discotic columnar phases in which the side-chain mesogens form the discotic columns around the polymer backbone.

CC 36-2 (Physical Properties of Synthetic High Polymers)
Section cross-reference(s): 1, 35, 63, 75

IT 112-47-0, 1,10-Decanediol 920-46-7, Methacryloyl chloride
139559-65-2 208181-91-3 **208181-92-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and polymn. of cellobiose methacrylate monomers for liq.-cryst. side-chain polymethacrylates)

IT **196098-40-5P** 208181-88-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and polymn. of cellobiose methacrylate monomers for

liq.-cryst. side-chain polymethacrylates)

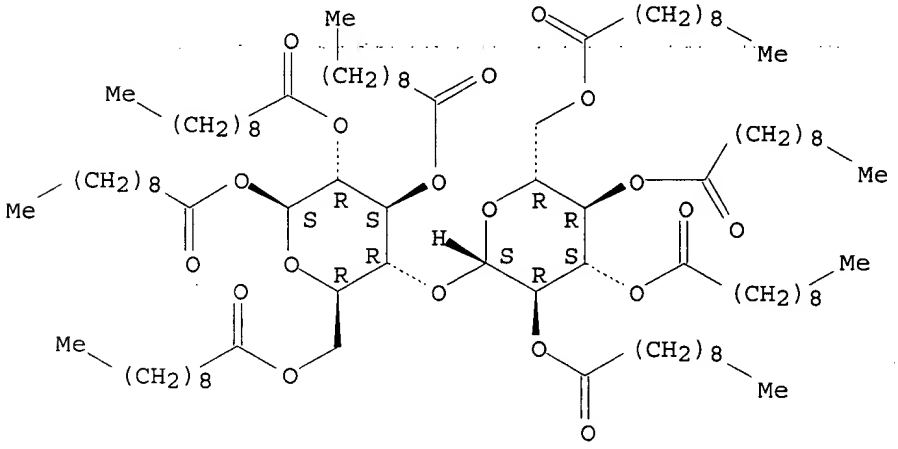
IT **208181-89-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis and polymn. of cellobiose methacrylate monomers for liq.-cryst. side-chain polymethacrylates)

IT 208181-93-5P **208181-95-7P** 208265-82-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and thermal properties of liq.-cryst. side-chain polymethacrylates with cellobiose groups)

IT **139559-65-2 208181-92-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and polymn. of cellobiose methacrylate monomers for liq.-cryst. side-chain polymethacrylates)

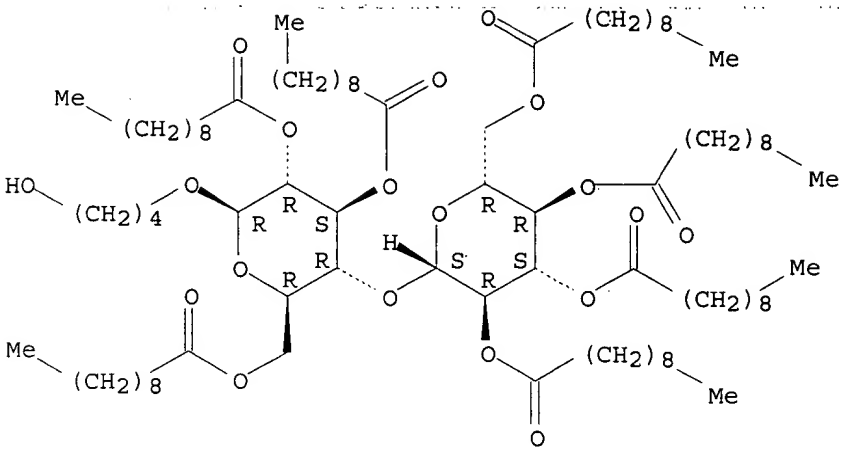
RN 139559-65-2 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



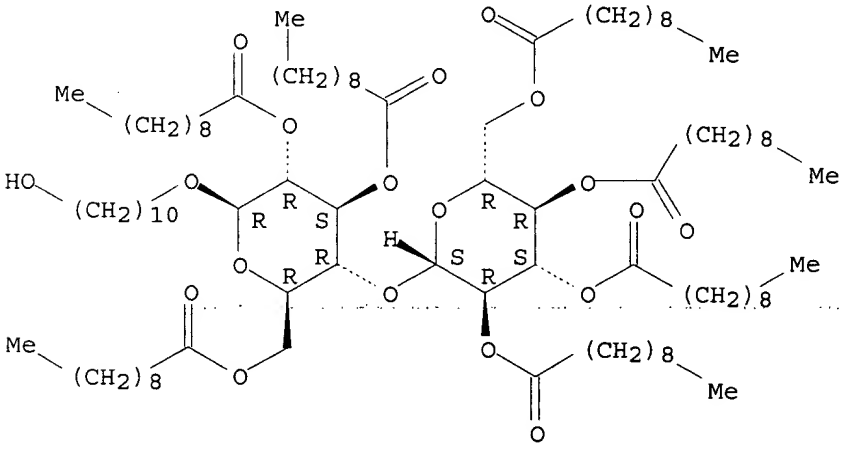
RN 208181-92-4 HCAPLUS
CN .beta.-D-Glucopyranoside, 4-hydroxybutyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



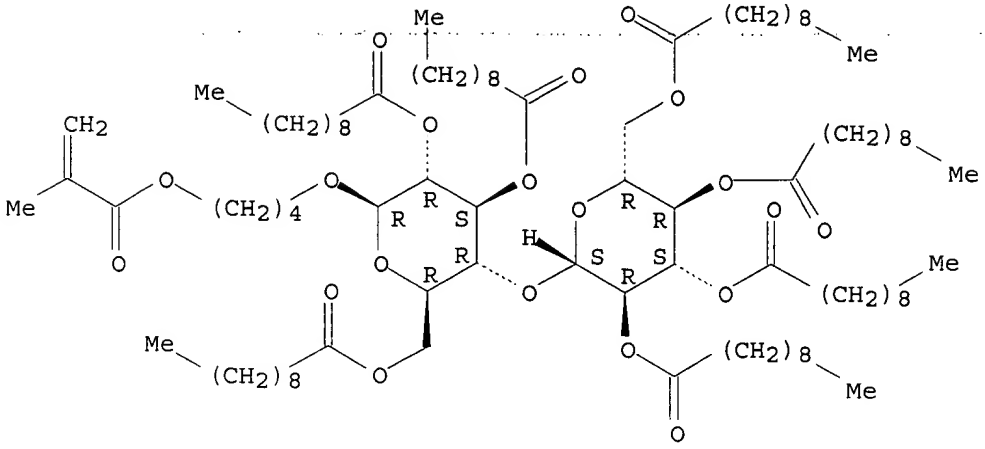
IT **196098-40-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and polymn. of cellobiose methacrylate monomers for liq.-cryst. side-chain polymethacrylates)
RN 196098-40-5 HCAPLUS
CN .beta.-D-Glucopyranoside, 10-hydroxydecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **208181-89-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis and polymn. of cellobiose methacrylate monomers for liq.-cryst. side-chain polymethacrylates)
RN 208181-89-9 HCAPLUS
CN .beta.-D-Glucopyranoside, 4-[(2-methyl-1-oxo-2-propenyl)oxy]butyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

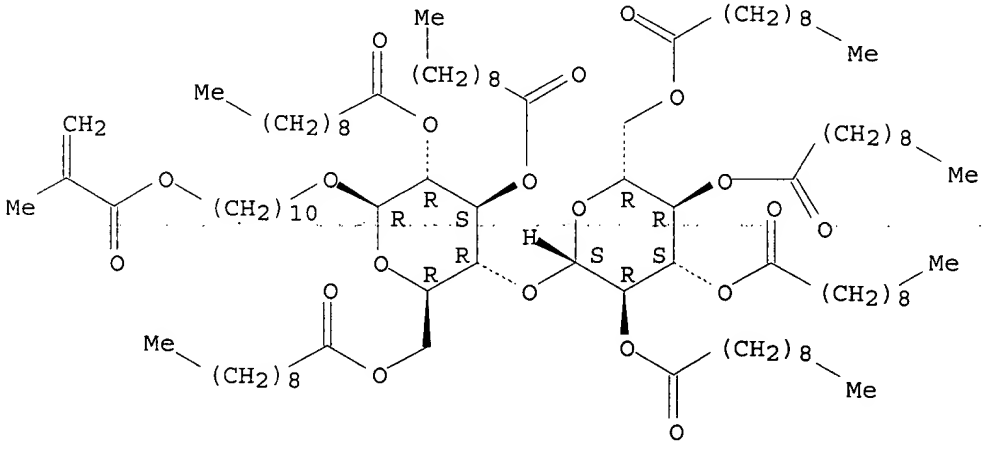


IT **208181-95-7P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and thermal properties of liq.-cryst. side-chain polymethacrylates with cellobiose groups)
RN 208181-95-7 HCAPLUS
CN .beta.-D-Glucopyranoside, 10-[(2-methyl-1-oxo-2-propenyl)oxy]decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate), homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 208181-94-6
CMF C96 H172 O20

Absolute stereochemistry.



L10 ANSWER 14 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:752615 HCAPLUS
DOCUMENT NUMBER: 128:68813
TITLE: Surface-imaging of frozen blue phases in a discotic liquid crystal with atomic force microscopy
AUTHOR(S): Hauser, Anton; Thieme, Mario; Saupe, Alfred; Heppke, Gerd; Kruerke, Daniel

CORPORATE SOURCE: Max-Planck-Arbeitsgruppe Flussigkristalline Systeme an der Martin-Luther-Universitat Halle, Halle, D-06108, Germany
SOURCE: Journal of Materials Chemistry (1997), 7(11), 2223-2229
CODEN: JMACEP; ISSN: 0959-9428
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Discotic cholesteric phases with extremely small pitches were obtained with cellobiose derivs. as chiral dopants. These binary mixts. tend to form up to three distinct blue phases. An interesting property of these mixts. is that the blue phases can be supercooled to a glass-like state. Microscopic studies, reflection spectra, and Kossel diagrams all indicate that the three discotic blue phases BPDI, BPDII and BPDIII are analogous to the known calamitic modifications. In addn. to the optical studies, the authors studied the free surfaces of the frozen blue phases using at. force microscopy.

CC 75-11 (Crystallography and Liquid Crystals)

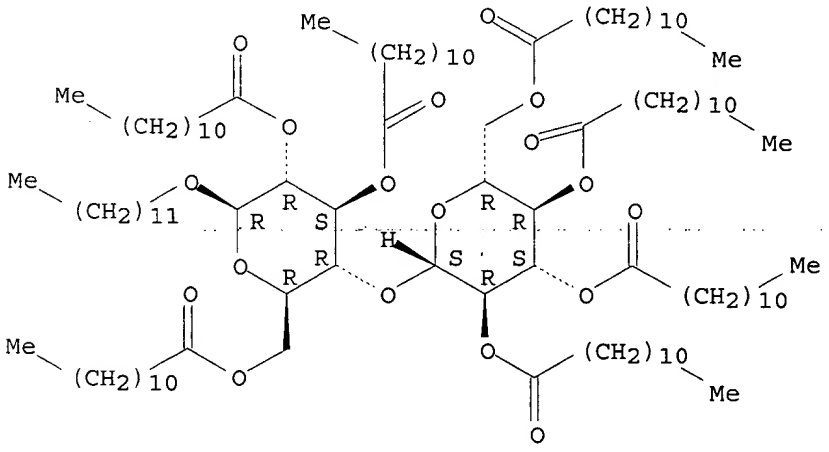
IT **129530-43-4** 200396-07-2
RL: PRP (Properties)
(surface-imaging of frozen blue phases in perlauroyl cellobioside-hexakis[(nonylphenyl)ethynyl]benzene discotic liq. crystal mixt. with at. force microscopy)

IT **129530-43-4**
RL: PRP (Properties)
(surface-imaging of frozen blue phases in perlauroyl cellobioside-hexakis[(nonylphenyl)ethynyl]benzene discotic liq. crystal mixt. with at. force microscopy)

RN 129530-43-4 HCAPLUS

CN .beta.-D-Glucopyranoside, dodecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tridodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

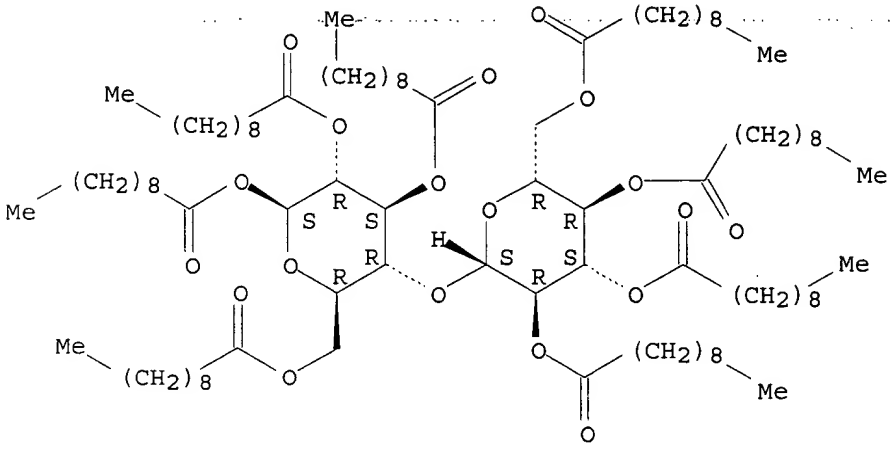


L10 ANSWER 15 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:534219 HCAPLUS
DOCUMENT NUMBER: 127:270764
TITLE: Oligosaccharide-based thermotropic liquid crystals. Part 4. Synthesis of cellobiose-based twin and triplet derivatives and their mesophase properties

AUTHOR(S): Takaragi, Akira; Sugiura, Makoto; Minoda, Masahiko; Miyamoto, Takeaki; Watanabe, Junji
CORPORATE SOURCE: Institute Chemical Research, Kyoto university, Uji, 611, Japan
SOURCE: Macromolecular Chemistry and Physics (1997), 198(8), 2583-2598
CODEN: MCHPES; ISSN: 1022-1352
PUBLISHER: Huethig & Wepf
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Previous work from this lab. has shown that cellobiose octaalkanoate (COA) functions as a thermotropic discotic mesogen, forming a hexagonal ordered columnar phase (Dho). In this work, we prepd. the COA-based discotic twin and triplet derivs. and examd. the mesomorphic properties of the derivs. by DSC, polarization microscopy, and XRD. In the former deriv., 2 cellobiose heptadecanoate (CHD) mols. (monomers) are combined through an alkyl spacer of varying length by ether and ester linkages at the C-1 position of the reducing end units of the monomers. Three CHD mols. having an alkyl spacer are connected with a coupling agent for the latter deriv. The results revealed that (i) all the twin derivs. form a distinct discotic columnar phase, (ii) the thermal stability of the mesophases of the twins is enhanced, compared with that of the monomer, when the length of the flexible spacer is appropriate, (iii) the twins with a relatively short spacer form a discotic rectangular ordered (Dro) phase, while those with a longer spacer form a pseudo-Dho phase, (iv) the triplets also form a discotic columnar mesophase, but not a hexagonal ordered columnar (Dho) phase, (v) the thermal stability of the mesophases of the triplets strongly depends on the chem. nature of coupling cores, and (vi) the packing structures of the cellobiose cores within the columns of both derivs. are markedly different from that of the monomer.
CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 33
IT 111-19-3, Decanedioyl dichloride 112-47-0, 1,10-Decanediol 4422-95-1, 1,3,5-Benzenetricarbonyl trichloride 21646-49-1, Tetradecanedioyl dichloride 23666-71-9, 1,2,3-Propanetricarbonyl trichloride 45270-18-6, Octadecanedioyl dichloride 101702-50-5, Eicosanedicarbonyl dichloride **139559-65-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs.)
IT 196098-36-9P **196098-40-5P 196098-43-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs.)
IT **196098-45-0P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs. and their phase transition and texture)
IT **196098-46-1P 196098-47-2P 196098-48-3P**
196098-49-4P 196216-58-7P 196216-59-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs. and their phase transition, texture, and lattice parameters)
IT **139559-65-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs.)
RN 139559-65-2 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-

glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

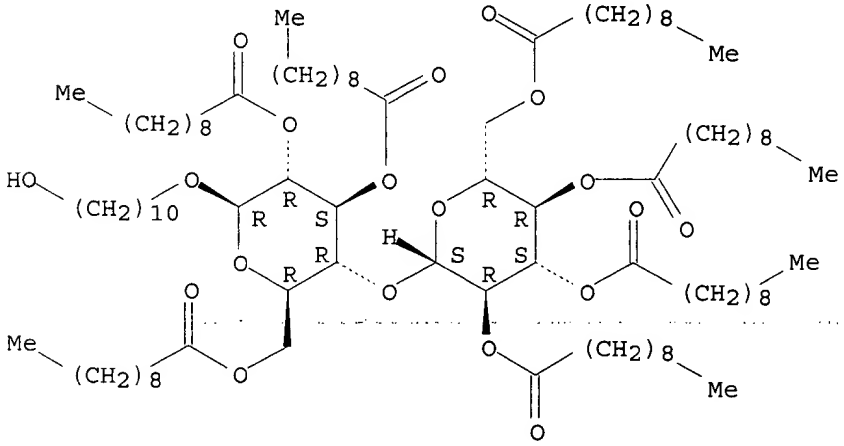


IT **196098-40-5P 196098-43-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs.)

RN 196098-40-5 HCAPLUS

CN .beta.-D-Glucopyranoside, 10-hydroxydecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

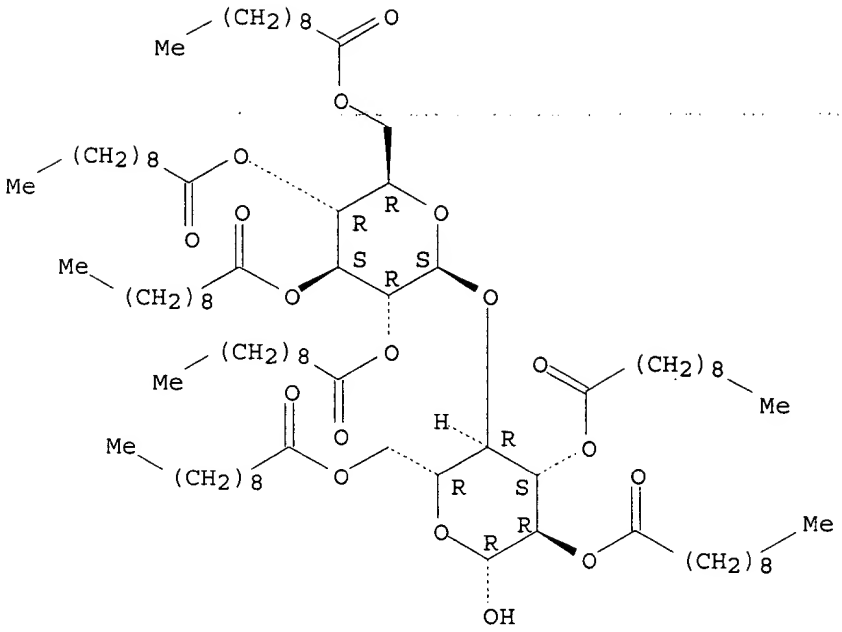
Absolute stereochemistry.



RN 196098-43-8 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 2,3,6-tris(decanoate) (9CI) (CA INDEX NAME)

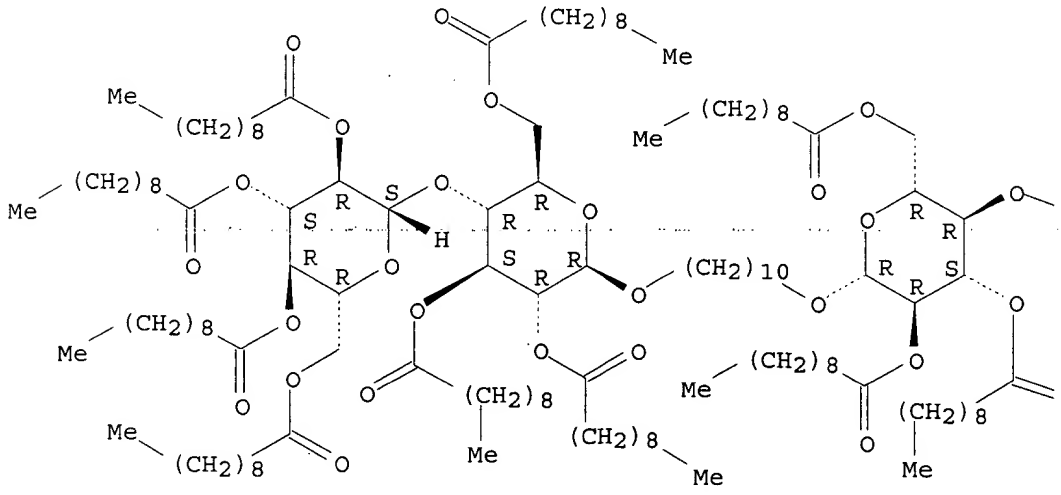
Absolute stereochemistry.



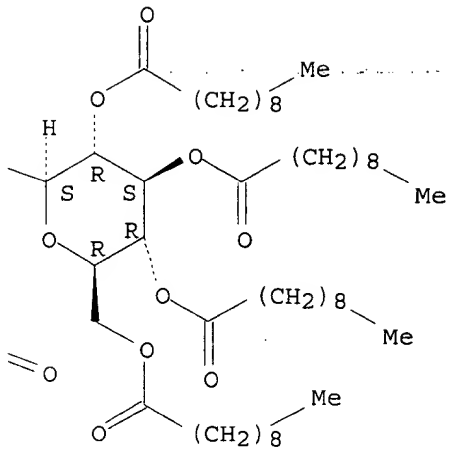
IT **196098-45-0P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs. and their phase transition and texture)
RN 196098-45-0 HCAPLUS
CN .beta.-D-Glucopyranoside, 1,10-decanediyl bis[4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, hexakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



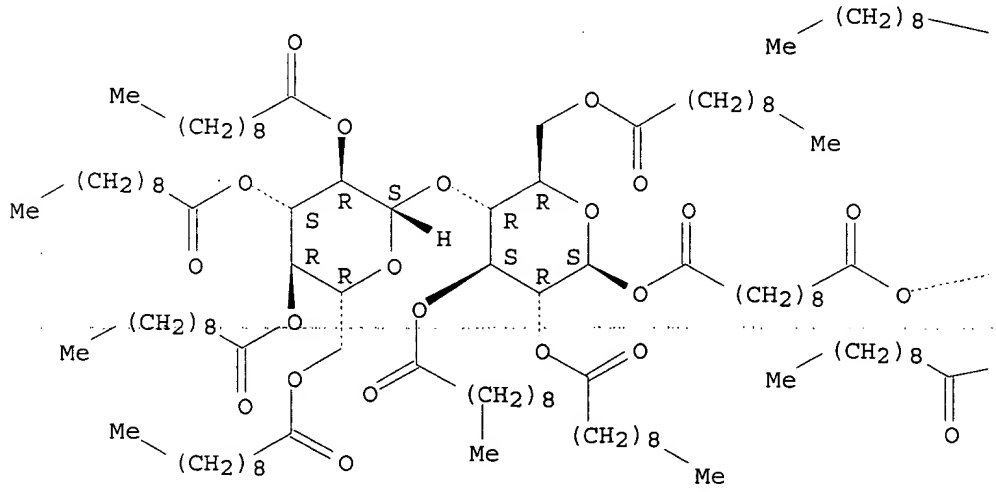
IT **196098-46-1P 196098-47-2P 196098-48-3P**
196098-49-4P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of thermotropic liq. cryst. cellobiose-based twin and triplet derivs. and their phase transition, texture, and lattice parameters)

RN 196098-46-1 HCAPLUS

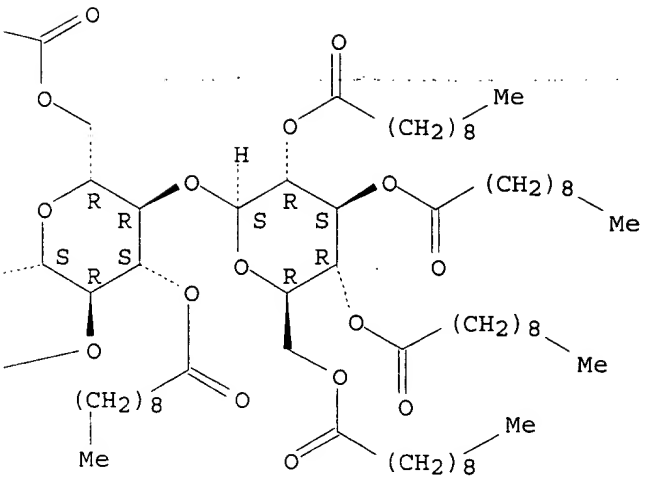
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1,1'-decanedioate 2,2',3,3',6,6'-hexakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



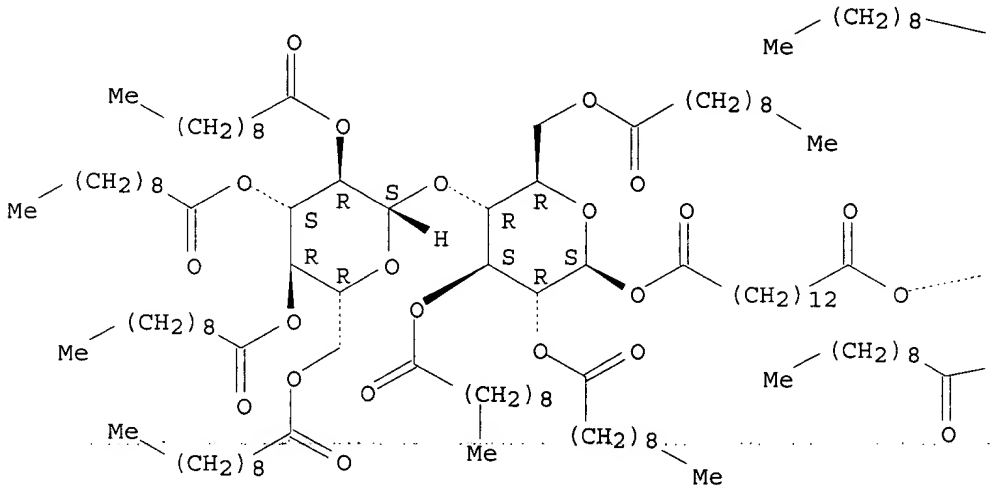
PAGE 1-B



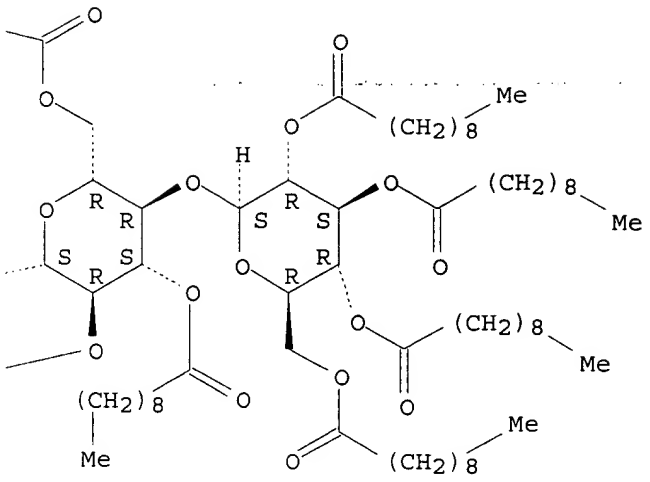
RN 196098-47-2 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1,1'-tetradecanedioate 2,2',3,3',6,6'-hexakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



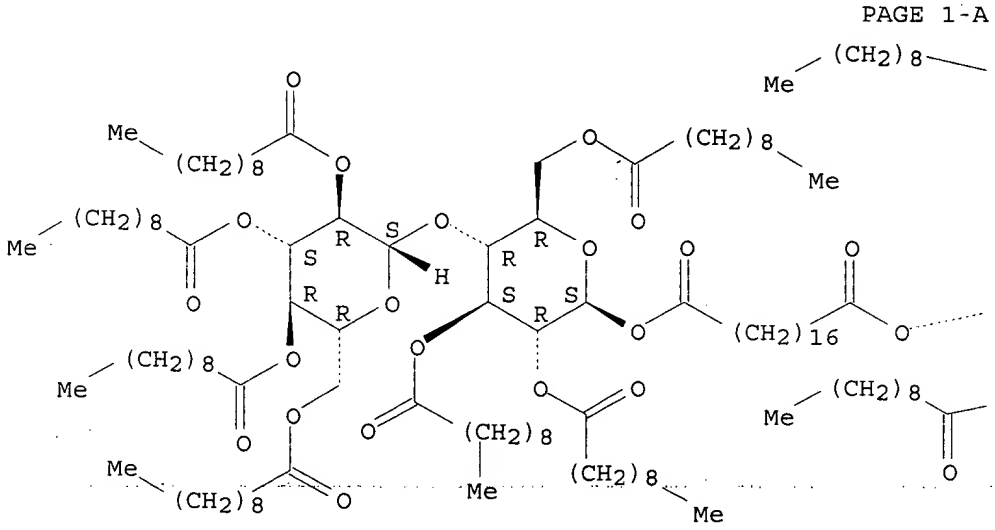
PAGE 1-B



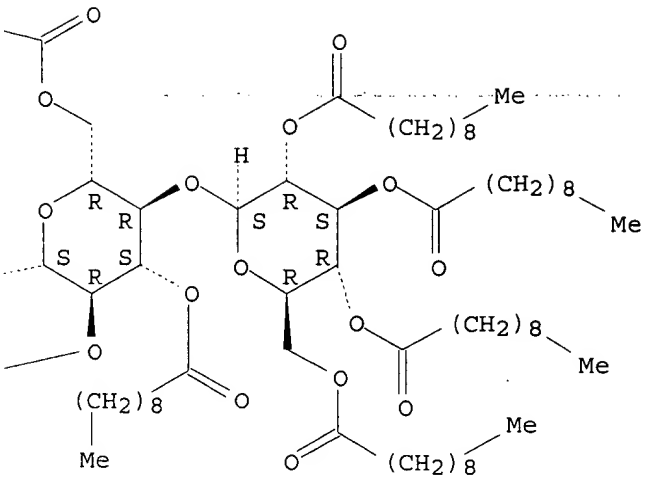
RN 196098-48-3 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1,1'-octadecanedioate 2,2',3,3',6,6'-hexakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



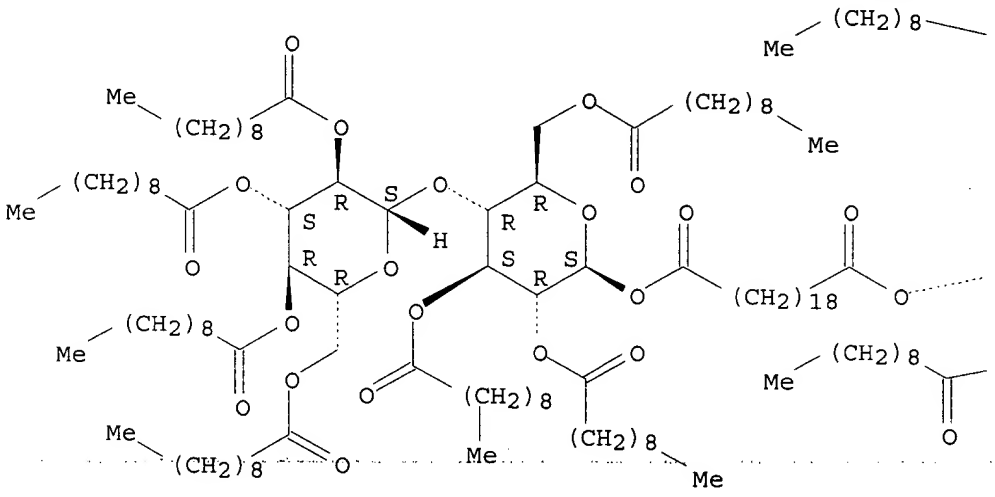
PAGE 1-B



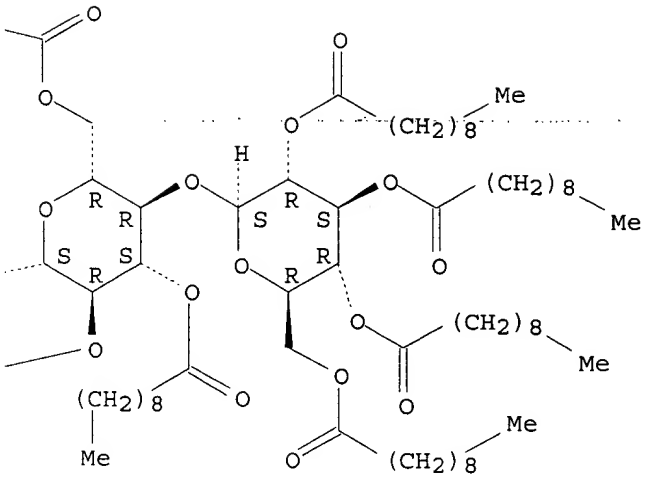
RN 196098-49-4 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, 1,1'-eicosanedioate 2,2',3,3',6,6'-hexakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L10 ANSWER 16 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:158867 HCAPLUS
DOCUMENT NUMBER: 124:270996
TITLE: Deuterium NMR study of a probe molecule dissolved in a carbohydrate liquid crystal
AUTHOR(S): Sandstroem, D.; Stenutz, R.; Widmalm, G.; Maliniak, A.
CORPORATE SOURCE: Div. Physical Chem., Stockholm Univ., Stockholm, S-106-91, Swed.
SOURCE: Journal of the Chemical Society, Faraday Transactions (1996), 92(1), 111-15
CODEN: JCFTEV; ISSN: 0956-5000
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A deuterium NMR investigation of C6D6 dissolved in the discotic mesogen octa-O-decanoyl-.beta.-cellobiose (Cel-II-10) is reported. The liq.-cryst. phase was found to be uniaxial in agreement with a previous x-ray study. The influence of magnetic field strength and thermal treatment on the mesophase alignment was investigated. From 2H NMR lineshape simulations, the form of the director distribution function was estd. In contrast to most discotics, the columns of Cel-II-10 orient parallel to the external field indicating that the anisotropic diamagnetic susceptibility of this mesophase is pos. An increase of the quadrupolar splitting of C6D6 was obsd. when the sample was heated. This behavior is interpreted in terms of a fast dynamic equil. between different solvation sites in the carbohydrate liq. crystal. The 2H NMR spectra in the solid phase also indicated an exchange process between several sites.

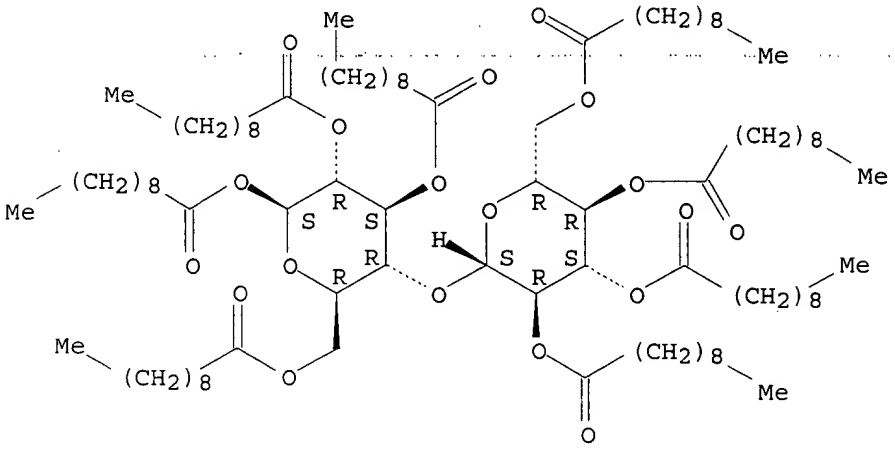
CC 65-5 (General Physical Chemistry)
Section cross-reference(s): 75

IT 1076-43-3, Benzene-d6 **139559-65-2**
RL: PRP (Properties)
(deuterium NMR study of a probe mol. dissolved in a carbohydrate liq. crystal)

IT **139559-65-2**
RL: PRP (Properties)
(deuterium NMR study of a probe mol. dissolved in a carbohydrate liq. crystal)

RN 139559-65-2 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 17 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:9929 HCAPLUS
DOCUMENT NUMBER: 124:176696
TITLE: Gelation of fully acylated cellobiose in alkane solution
AUTHOR(S): Ide, Nobuhiro; Fukuda, Takeshi; Miyamoto, Takeaki
CORPORATE SOURCE: Institute Chemical Research, Kyoto University, Uji, 611, Japan
SOURCE: Bulletin of the Chemical Society of Japan (1995), 68(12), 3423-8
CODEN: BCSJA8; ISSN: 0009-2673
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Cellobiose octa(decanoate), a discotic columnar mesogen, was found to form in hexadecane soln. various mol. assemblies such as a lyotropic liq. crystal of discotic columnar type, multimol. micelles, and a thermoreversible gel, depending on the concn. and temp. The gelation, obsd. even at very low concns., say, <0.01 wt. fraction of the mesogenic compd., is believed to proceed by local coagulation of long threadlike micelles into micro-liq.-crystallites, which work as cross-linked points combining the threadlike micelles. This will be a new type of gel that could be termed a "liq. cryst. gel".

CC 33-4 (Carbohydrates)
Section cross-reference(s): 75

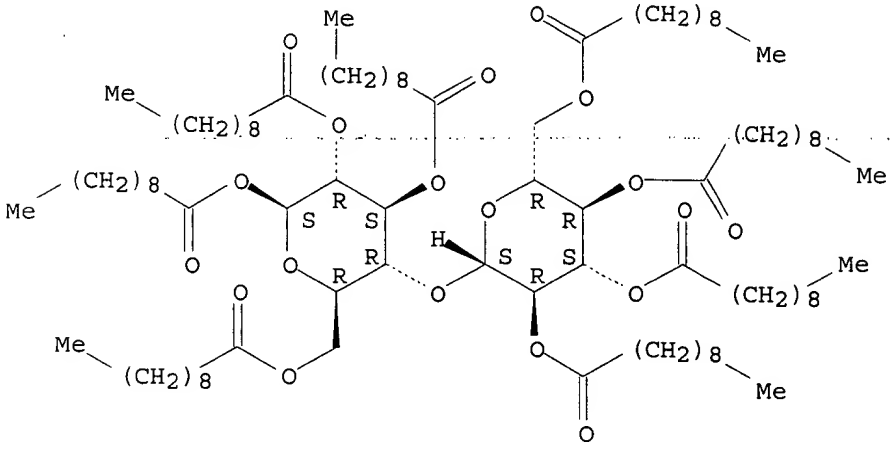
IT **139559-65-2P**, .beta.-Cellobiose octa(decanoate)
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and liq. cryst. formation during gelation of cellobiose octadecanoate)

IT **139559-65-2P**, .beta.-Cellobiose octa(decanoate)
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and liq. cryst. formation during gelation of cellobiose octadecanoate)

RN 139559-65-2 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-

glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 18 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:905031 HCAPLUS
DOCUMENT NUMBER: 124:102558
TITLE: Discotic columnar liquid crystals in oligosaccharide derivatives III. Anomeric effects on the thermo-mesomorphic properties of cellobiose octa-alkanoates
AUTHOR(S): Takada, A.; Ide, N.; Fukuda, T.; Miyamoto, T.; Yamagata, K.; Watanabe, J.
CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan
SOURCE: Liquid Crystals (1995), 19(4), 441-8
CODEN: LICRE6; ISSN: 0267-8292
PUBLISHER: Taylor & Francis
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The .alpha.- and .beta.-anomers of cellobiose octa-alkanoates with purities .gtorsim.95 per cent were prepd. from .beta.-cellobiose by two simple esterification methods. The C no. n of the acyl substituents ranged from 7 to 10 in both anomers. Both .alpha.- and .beta.-anomers exhibited two types of discotic columnar phases (Dho and Dro), depending on n and temp., but their phase diagrams were appreciably different. Generally, the .alpha.-anomers formed more stable mesophases than the .beta.-anomers. In the Dro phase of the .beta.-anomers, the column axis was tilted from the normal to the disks, while no such tilting was obsd. in the other phases.

CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 33

IT **139432-94-3P**, .beta.-Cellobiose octaoctanoate **139432-95-4P**, .beta.-Cellobiose octanonanoate **139559-65-2P**, .beta.-Cellobiose octadecanoate **153113-90-7P**, .beta.-Cellobiose octaundecanoate **172585-65-8P**, .alpha.-Cellobiose octaoctanoate **172585-66-9P**, .alpha.-Cellobiose octanonanoate **172585-67-0P**, .alpha.-Cellobiose octadecanoate **172585-68-1P**, .alpha.-Cellobiose octaundecanoate
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(prepn. and anomeric effects on liq. crystal properties of column

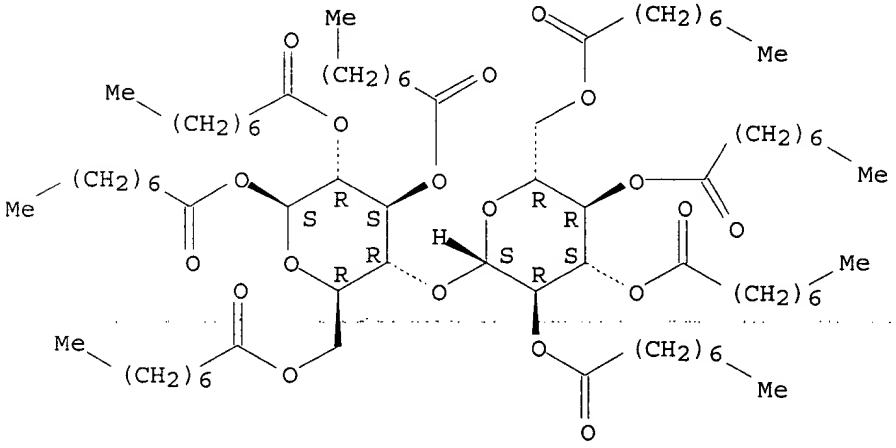
discotic)

IT **139432-94-3P**, .beta.-Cellobiose octaoctanoate **139432-95-4P**, .beta.-Cellobiose octanonanoate **139559-65-2P**, .beta.-Cellobiose octadecanoate **153113-90-7P**, .beta.-Cellobiose octaundecanoate **172585-65-8P**, .alpha.-Cellobiose octaoctanoate **172585-66-9P**, .alpha.-Cellobiose octanonanoate **172585-67-0P**, .alpha.-Cellobiose octadecanoate **172585-68-1P**, .alpha.-Cellobiose octaundecanoate
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(prepn. and anomeric effects on liq. crystal properties of column discotic)

RN 139432-94-3 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

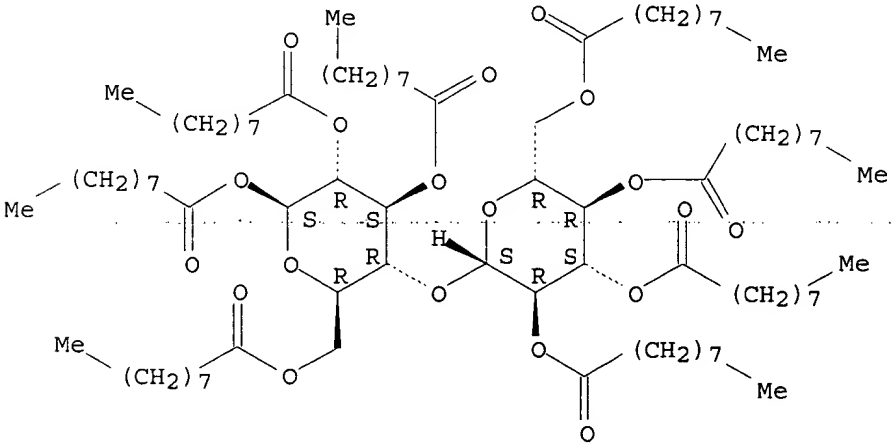
Absolute stereochemistry.



RN 139432-95-4 HCAPLUS

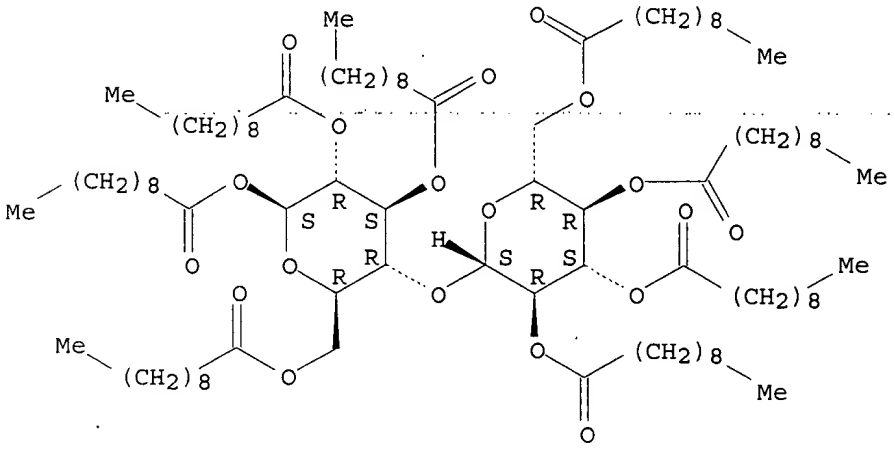
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



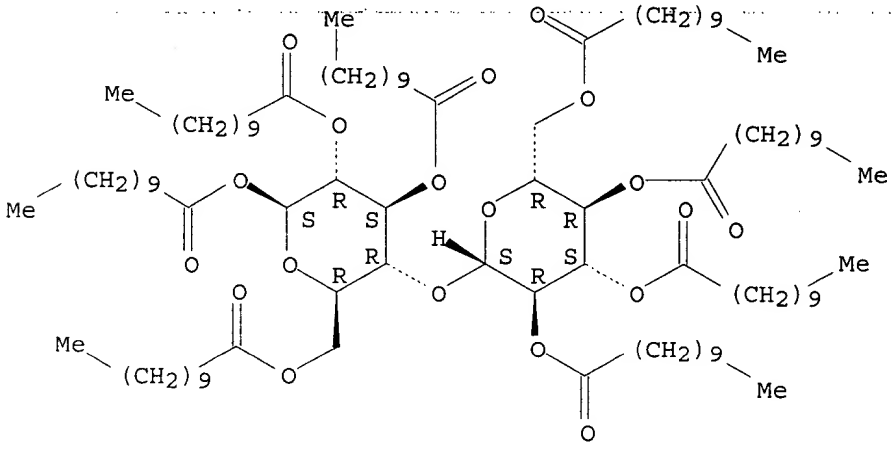
RN 139559-65-2 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



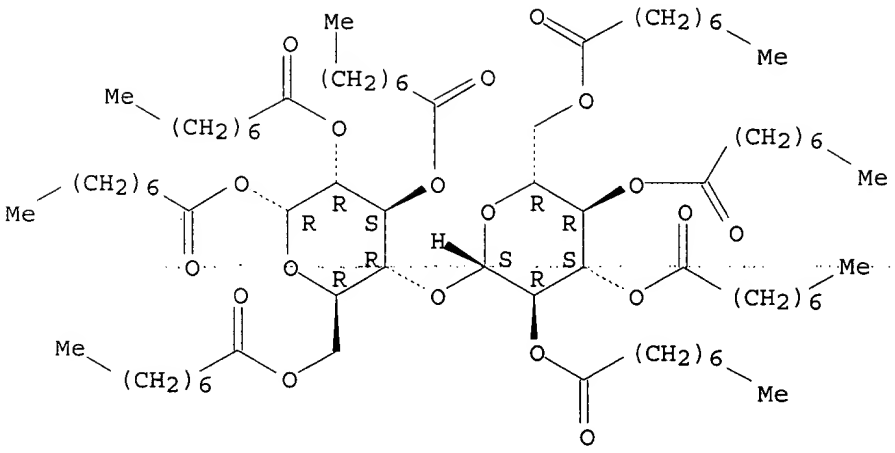
RN 153113-90-7 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



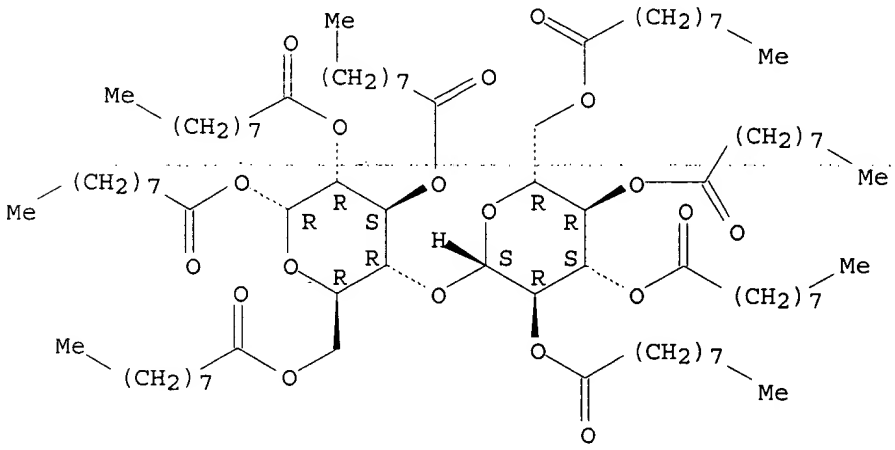
RN 172585-65-8 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



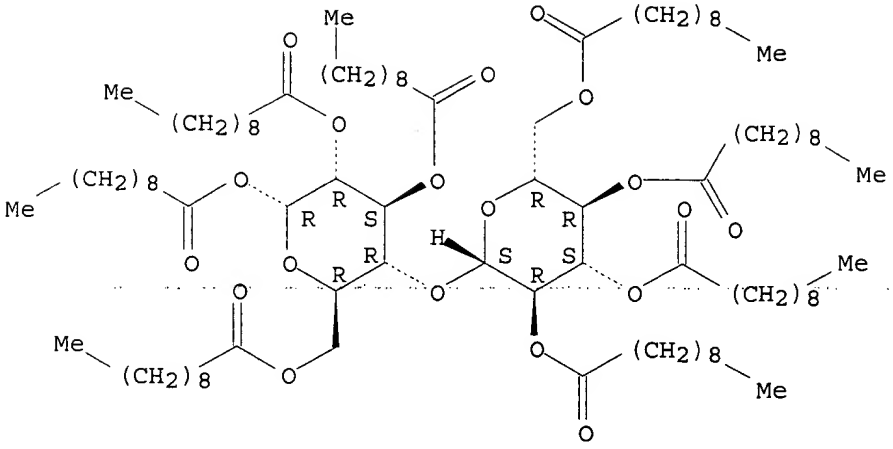
RN 172585-66-9 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



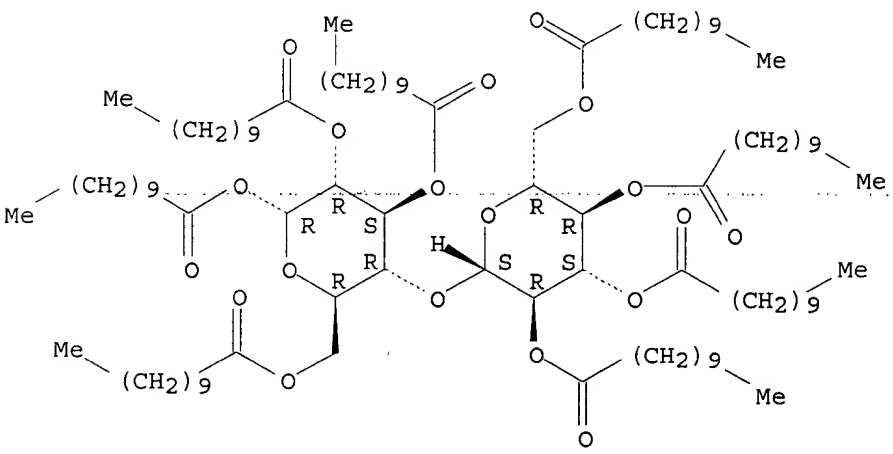
RN 172585-67-0 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 172585-68-1 HCAPLUS
CN .alpha.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 19 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:167050 HCAPLUS
DOCUMENT NUMBER: 120:167050
TITLE: Chain-Length Dependence of the Mesomorphic Properties of Fully Decanoated Cellulose and Cellooligosaccharides
AUTHOR(S): Takada, Akihiko; Fujii, Kazunari; Watanabe, Junji; Fukuda, Takeshi; Miyamoto, Takeaki
CORPORATE SOURCE: Institute for Chemical Research, Kyoto University, Uji, 611, Japan
SOURCE: Macromolecules (1994), 27(6), 1651-3
CODEN: MAMOBX; ISSN: 0024-9297
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The mesomorphic properties of fully decanoated cellulose and cellooligosaccharides were studied as a function of the d.p. Oligomeric

derivs. with d.p. < 5 formed a discotic columnar phase, whereas polymeric derivs. with d.p. > 20 formed a hexagonal columnar phase. The mol. axis in the discotic columnar phase was perpendicular to the column axis, whereas that in the columnar phase of the polymeric derivs. was parallel to the column axis. The transition from the perpendicular to the parallel orientation of mol. axis should occur at a d.p. .apprx. 10, which is actually unobservable because crystn. proceeds for samples with 5 < d.p. < 20.

CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)

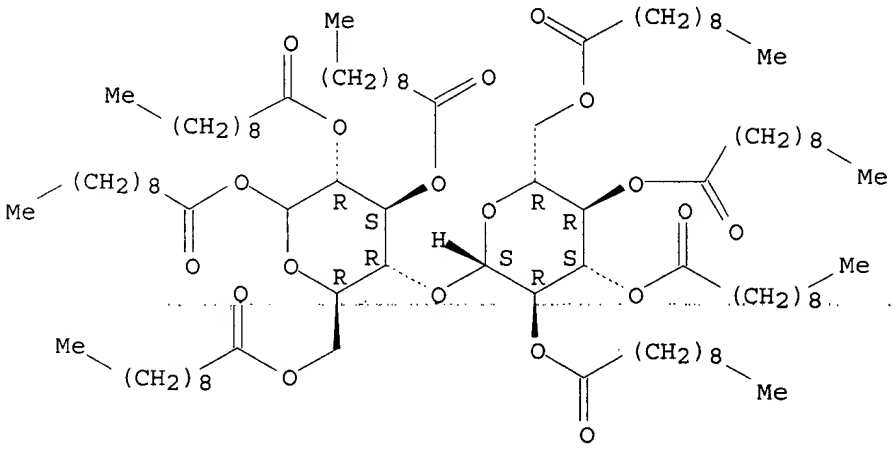
IT 9004-34-6D, Cellulose, decanoated 9056-00-2, Cellulose tridecanoate **128940-28-3**
RL: PRP (Properties)
(mesomorphic properties of, chain length and mol. wt. effects on)

IT **128940-28-3**
RL: PRP (Properties)
(mesomorphic properties of, chain length and mol. wt. effects on)

RN 128940-28-3 HCAPLUS

CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 20 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1994:147566 HCAPLUS

DOCUMENT NUMBER: 120:147566

TITLE: First observation of selective reflection and blue phases in chiral discotic liquid crystals

AUTHOR(S): Kruerke, D.; Kitzerow, H. S.; Heppke, G.; Vill, V.

CORPORATE SOURCE: Iwan-N.-Stranski-Inst., Berlin, D-10623, Germany

SOURCE: Berichte der Bunsen-Gesellschaft (1993), 97(10), 1371-5
CODEN: BBPCAX; ISSN: 0005-9021

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The helical structure was studied of discotic cholesteric liq. crystals using cellobiose derivs. as chiral dopants in a discotic nematic host. A characteristic property of the new mixts. is the occurrence of a glass-like state. Due to extremely small pitches, selective reflection was obsd. in a chiral discotic system. Discotic blue phases were obsd. Microscopic studies, reflection spectra, and Kossel diagrams indicate the appearance of 3 discotic blue phases, BPDI, BPDII, and BPDIII, which

behave similar to the known calamitic modifications.

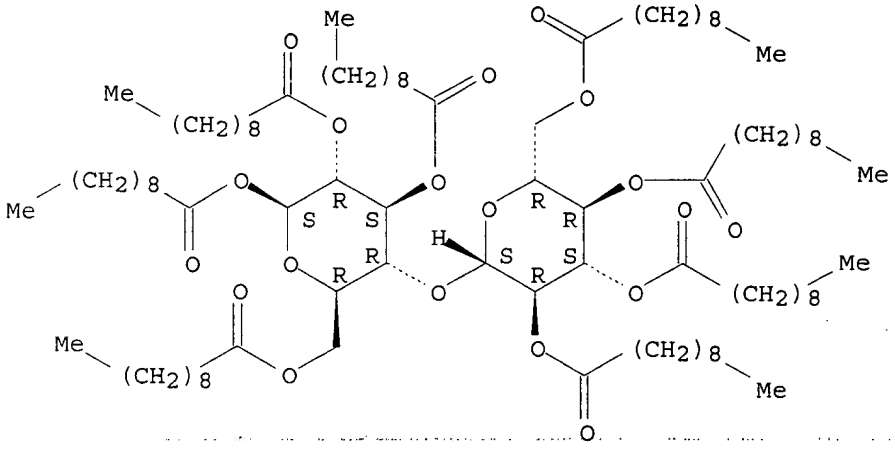
CC 73-4 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 75

IT 133938-14-4 **139559-65-2 153113-90-7**
RL: PRP (Properties)
(selective reflection and blue phases in chiral discotic mixt. of hexakis(nonylphenylethynyl)benzene and)

IT **139559-65-2 153113-90-7**
RL: PRP (Properties)
(selective reflection and blue phases in chiral discotic mixt. of hexakis(nonylphenylethynyl)benzene and)

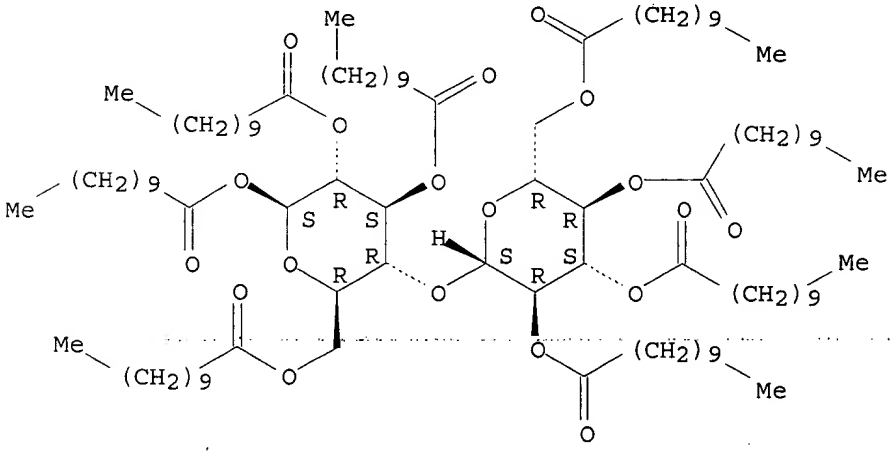
RN 139559-65-2 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 153113-90-7 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



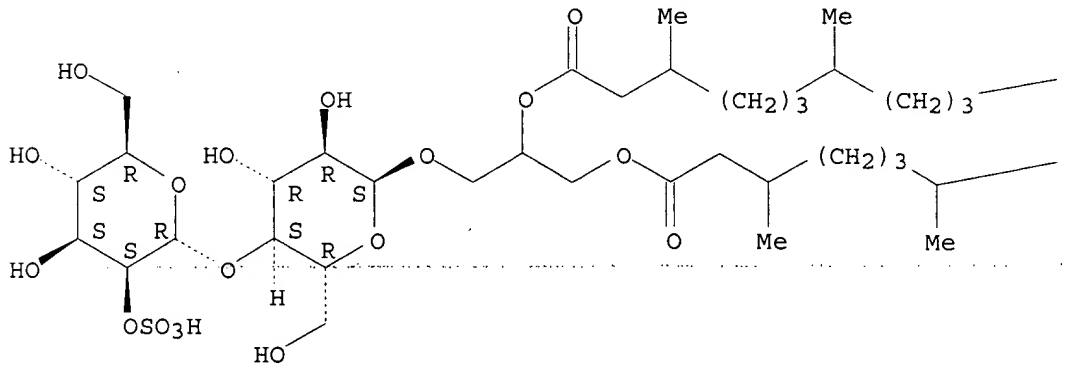
L10 ANSWER 21 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:666075 HCAPLUS
DOCUMENT NUMBER: 119:266075
TITLE: Characterization of the dominant halophilic archaea in a bacterial bloom in the Dead Sea
AUTHOR(S): Oren, Aharon; Gurevich, Peter
CORPORATE SOURCE: Alexander Silberman Inst. Life Sci., Hebrew Univ. Jerusalem, Jerusalem, Israel
SOURCE: FEMS Microbiology Ecology (1993), 12(4), 249-56
CODEN: FMECEZ; ISSN: 0168-6496
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A mass bloom of halophilic archaea developed in the Dead Sea in the summer of 1992, with peak densities of >3 .times. 107 cells/mL, imparting a red coloration to the water. Microscopical examn. showed a numerical dominance of pleomorphic, flat cells. Attempts to identify the dominant type of halophilic archaea by means of growth expts., both on agar plates and by diln. in liq. media, were unsuccessful, as viable counts obtained were two or more orders of magnitude lower than the total microscopic counts. Anal. of the polar lipids in the Dead Sea biomass during the bloom showed one major glycolipid to be present in the exts., corresponding with the sulfated diglycosyl diether lipid (S-DGD-1) characteristic of the genus Haloferax. No indications were found for the presence of significant amts. of other glycolipids that indicate the presence of large nos. of Dead Sea archaea such as Halobacterium sodomense or Haloarcula marismortui, or Halobacterium species such as H. halobium, H. salinarium and H. saccharovorum. Thus, the numerically dominant organism in the bloom is probably a difficult to culture, not yet isolated, representative of the genus Haloferax.

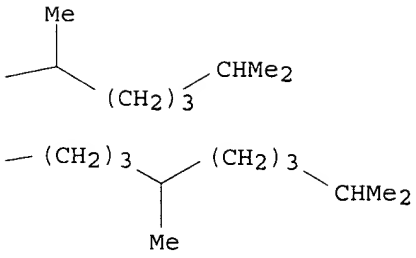
CC 10-1 (Microbial, Algal, and Fungal Biochemistry)
IT 81252-01-9 **151419-06-6** 151419-07-7 151419-08-8 151436-93-0
RL: PROC (Process)
(of halophilic archaebacteria, identification of)
IT **151419-06-6**
RL: PROC (Process)
(of halophilic archaebacteria, identification of)
RN 151419-06-6 HCAPLUS
CN .alpha.-D-Glucopyranoside, 2,3-bis[(3,7,11,15-tetramethyl-1-oxohexadecyl)oxy]propyl 4-O-(2-O-sulfo-.alpha.-D-mannopyranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L10 ANSWER 22 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:623566 HCAPLUS
DOCUMENT NUMBER: 117:223566
TITLE: Columnar liquid crystals in oligosaccharide derivatives. II. Two types of discotic columnar liquid-crystalline phase of cellobiose alkanoates
AUTHOR(S): Takada, A.; Fukuda, T.; Miyamoto, T.; Yakoh, Y.; Watanabe, J.
CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan
SOURCE: Liquid Crystals (1992), 12(2), 337-45
CODEN: LICRE6; ISSN: 0267-8292
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A series of cellobiose octaalkanoates, Cel-II-n (n is the C no. of the alkyl chain), with n = 7-14 were prepd. and their mesogenic properties examd. by DSC, optical polarizing microscopy and x-ray diffraction. All of these compds. form enantiotropic discotic columnar phases, in which the columns are built up by a regular stacking of the cellobiose moieties and are packed in a 2-dimensional lattice. Homologs with n = 9-14 form the Dh0 phase only while the compd. with n = 7 forms the Dr0 phase at lower temps. Structural parameters obtained from x-ray diffraction studies are presented for both phases.

CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 33

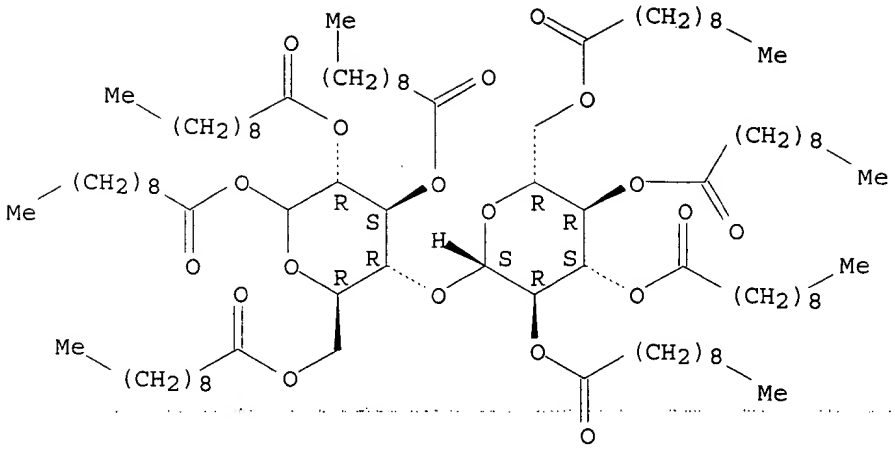
IT **128940-28-3P 143036-62-8P 143074-16-2P 143074-17-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (liq. crystal, prepn. and properties and columnar discotic structure of)

IT **143062-39-9P 144238-71-1P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (liq. crystal, prepn. and properties of)

IT **128940-28-3P 143036-62-8P 143074-16-2P 143074-17-3P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (liq. crystal, prepn. and properties and columnar discotic structure of)

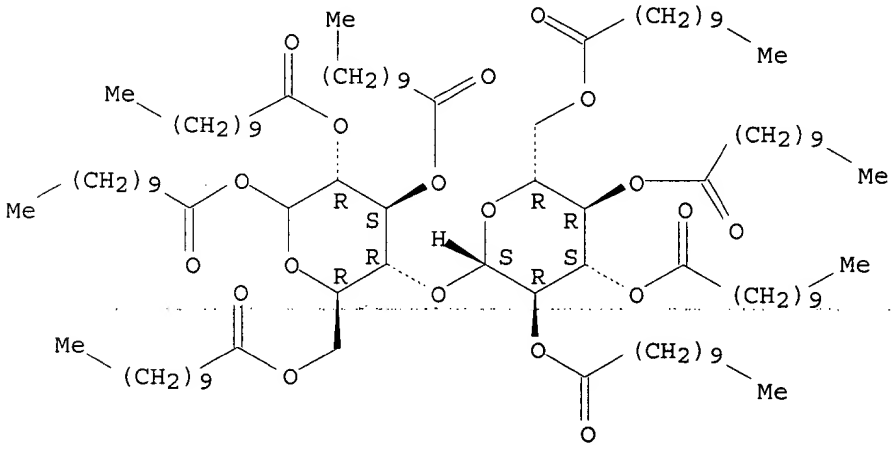
RN 128940-28-3 HCAPLUS
CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



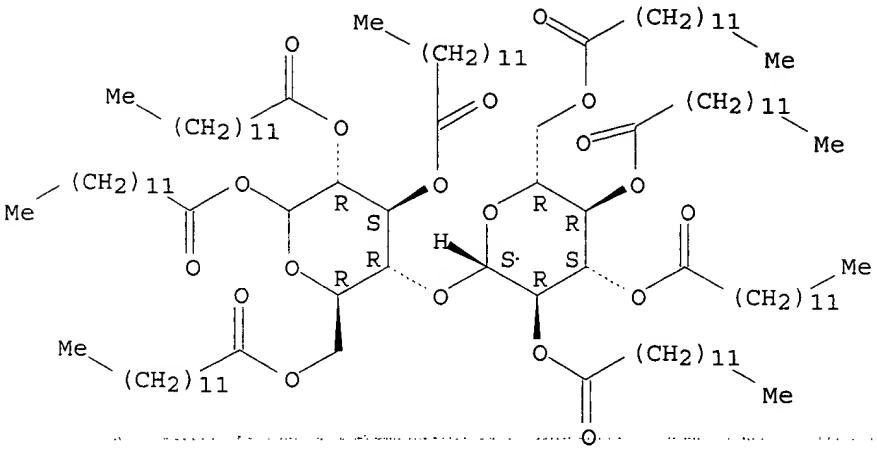
RN 143036-62-8 HCAPLUS
CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoundecyl)-.beta.-D-glucopyranosyl]-, tetraundecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



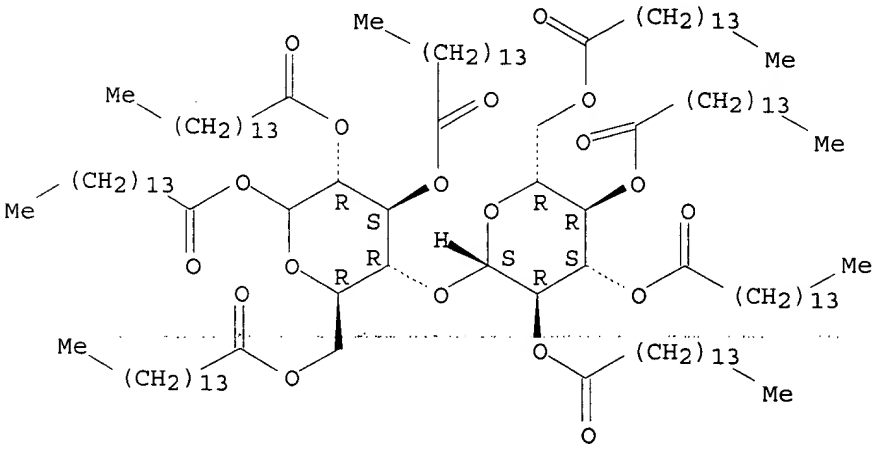
RN 143074-16-2 HCAPLUS
CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxotridecyl)-.beta.-D-glucopyranosyl]-, tetratridecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



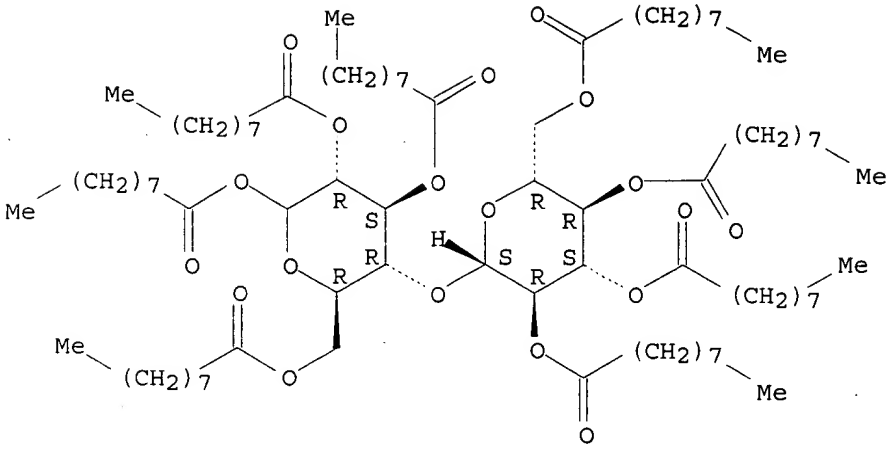
RN 143074-17-3 HCAPLUS
CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxopentadecyl)-.beta.-D-glucopyranosyl]-, tetrapentadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

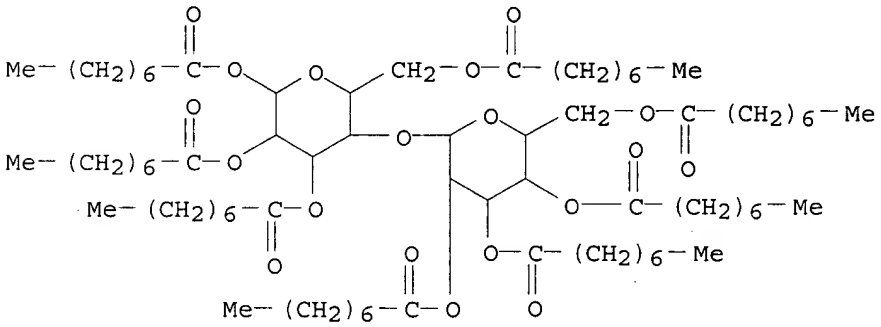


IT **143062-39-9P 144238-71-1P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(liq. crystal, prepn. and properties of)
RN 143062-39-9 HCAPLUS
CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

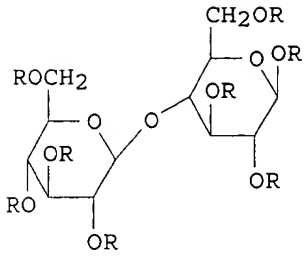
Absolute stereochemistry.



RN 144238-71-1 HCAPLUS
CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)



L10 ANSWER 23 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:408310 HCAPLUS
DOCUMENT NUMBER: 117:8310
TITLE: Preparation of cellobiose octa(n-alkanoate)s and their thermal properties
AUTHOR(S): Takada, Akihiko; Itoh, Takahiro; Fukuda, Takeshi; Miyamoto, Takeaki
CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan
SOURCE: Bulletin of the Institute for Chemical Research, Kyoto University (1991), 69(2), 77-83
CODEN: BICRAS; ISSN: 0023-6071
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB Cellobiose octa(n-alkanoate)s (CbOA's) I [R = CO(CH2)nMe, n = 4-8, 10, 12) were prepd., and their thermal and structural properties were studied by DSC, polarization optical microscopy, and polarization IR. CbOA's with an acyl length between 6 and 14 in carbon no. were found to form a thermotropic liq. crystal. Comparison of their thermal data with those of cellulose tri(n-alkanoate)s indicated different structuring principles for the oligomer and polymer systems, consistently with the previous studies by x-ray diffraction. The polarization IR data were apparently consistent with the proposed discotic columnar structuring of CbOA mols.

CC 33-4 (Carbohydrates)
Section cross-reference(s): 75

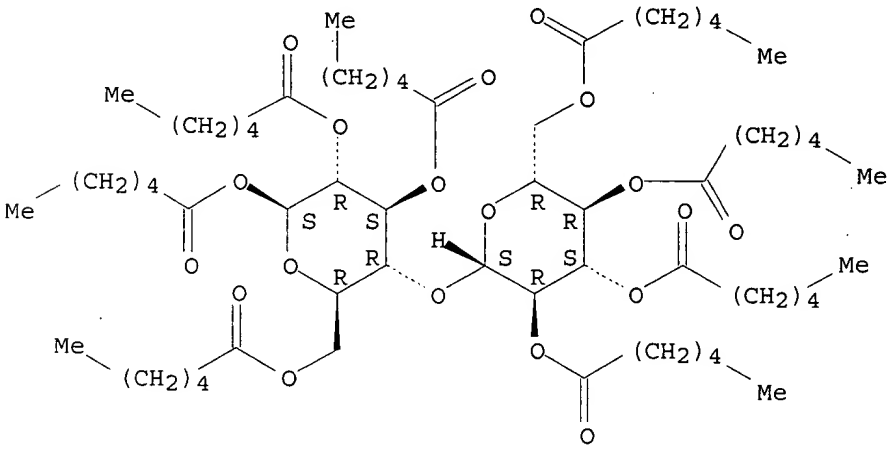
IT **139432-92-1P 139432-93-2P 139432-94-3P**
139432-95-4P 139432-96-5P 139559-65-2P
141671-23-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and thermal properties as)

IT **139432-92-1P 139432-93-2P 139432-94-3P**
139432-95-4P 139432-96-5P 139559-65-2P
141671-23-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and thermal properties as)

RN 139432-92-1 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxohexyl)-.beta.-D-glucopyranosyl]-, tetrahexanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

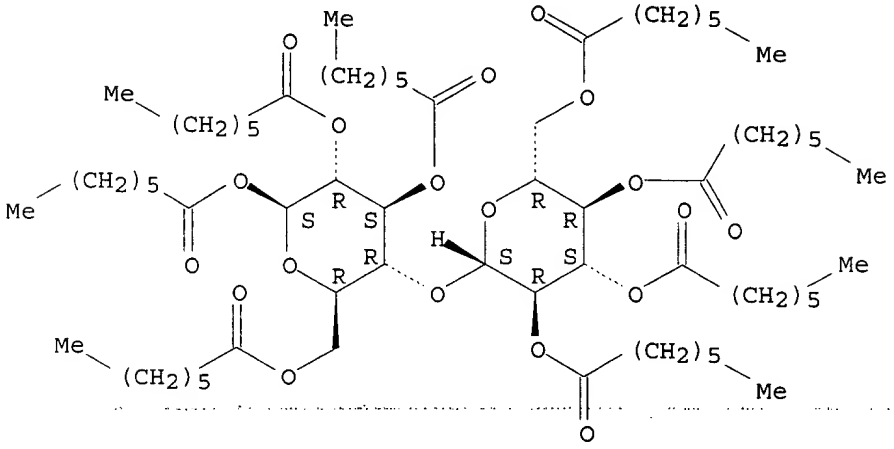


RN 139432-93-2 HCAPLUS

CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxoheptyl)-.beta.-D-

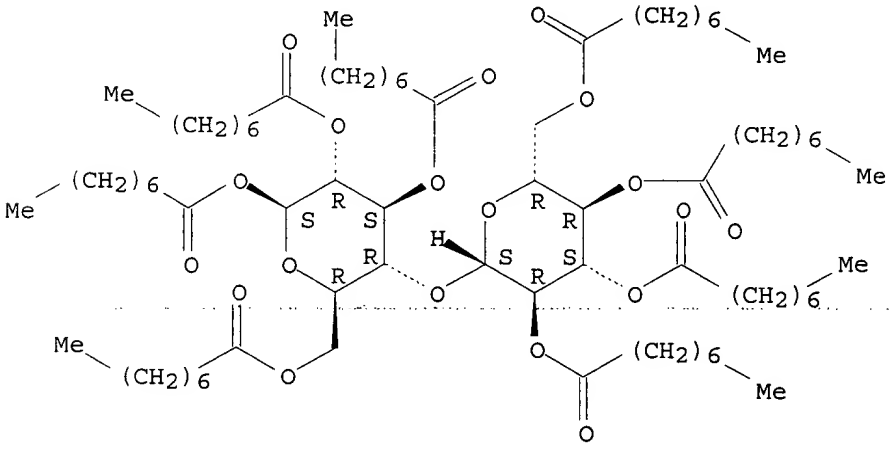
glucopyranosyl]-, tetraheptanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



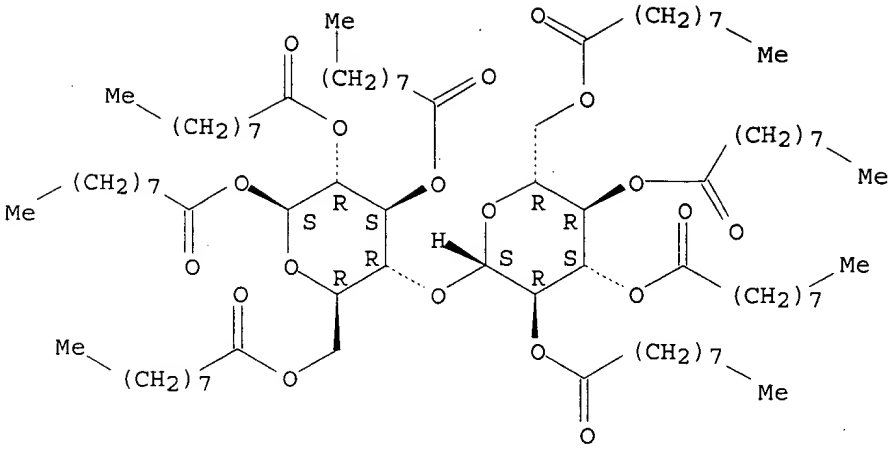
RN 139432-94-3 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, tetraoctanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



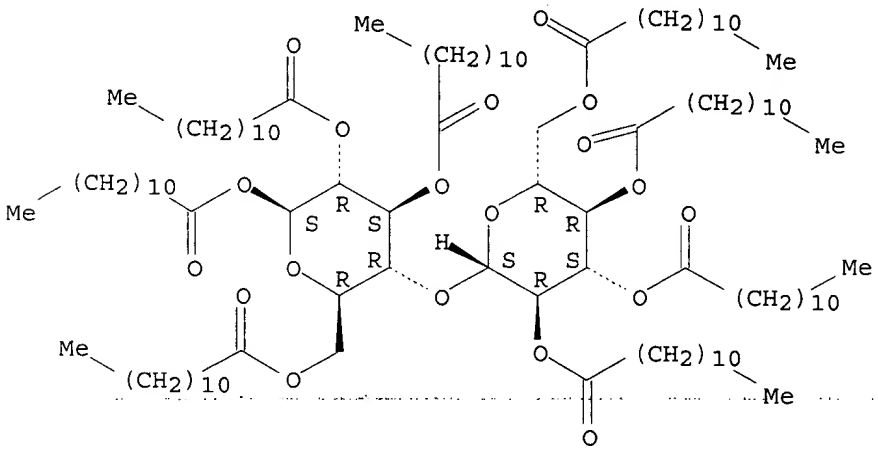
RN 139432-95-4 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, tetranonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



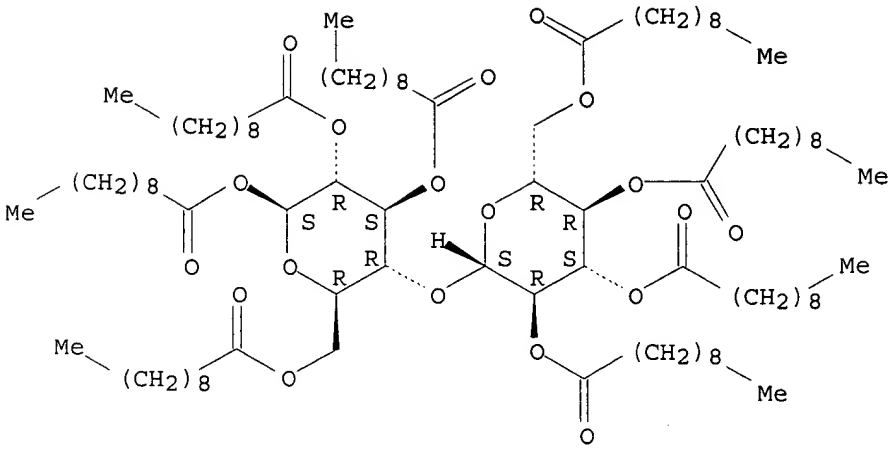
RN 139432-96-5 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tetradodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



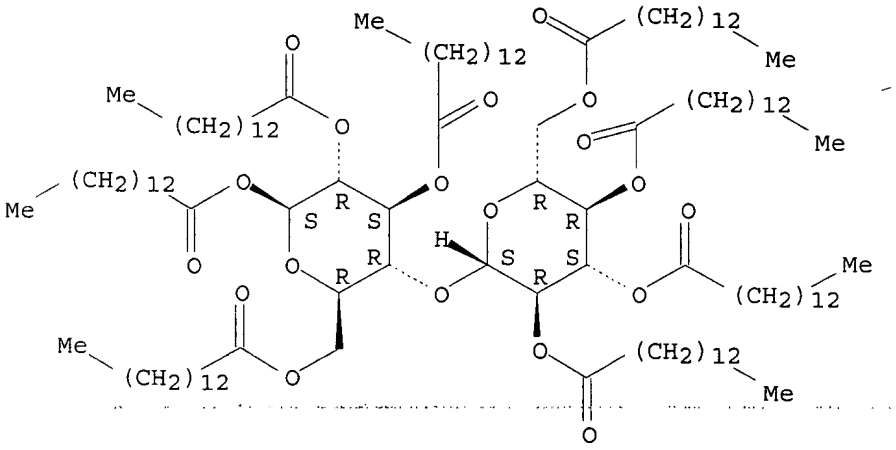
RN 139559-65-2 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 141671-23-0 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxotetradecyl)-.beta.-D-glucopyranosyl]-, tetratetradecanoate (9CI) (CA INDEX NAME)

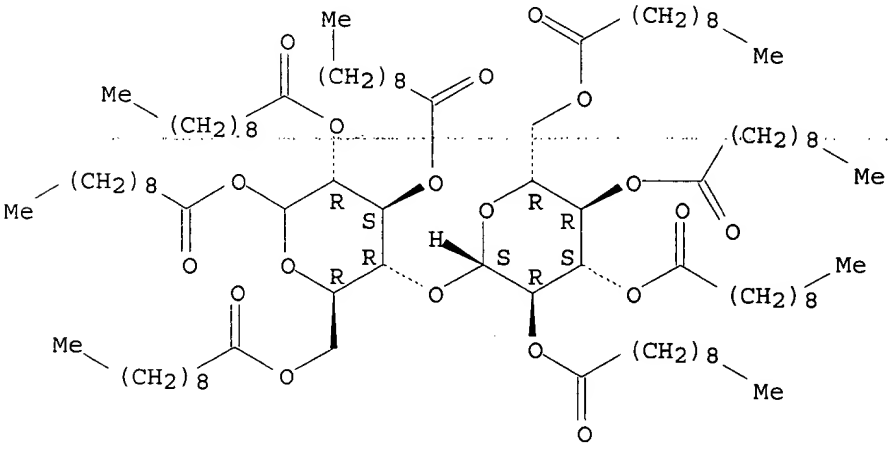
Absolute stereochemistry.



L10 ANSWER 24 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:163033 HCAPLUS
DOCUMENT NUMBER: 116:163033
TITLE: Thermotropic liquid crystals based on oligosaccharides
AUTHOR(S): Fukuda, Takeshi; Sugiura, Makoto; Takada, Akihiko; Itoh, Takahiro; Ma, Yungdae; Minoda, Masahiko; Miyamoto, Takeaki
CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan
SOURCE: Sen'i Gakkaishi (1991), 47(8), 452-5
CODEN: SENGA5; ISSN: 0037-9875
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Acylation or regio-selective alkylation of cello- and/or chito-oligosaccharides provides a new family of thermotropic liq. crystals. Some of the mesophase textures and thermal properties exhibited by these compds are presented.

CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 33
IT 114418-07-4 122119-57-7 122211-80-7 **128940-28-3**
139953-88-1 139953-89-2 139979-75-2
RL: PRP (Properties)
(texture and thermal properties of)
IT **128940-28-3**
RL: PRP (Properties)
(texture and thermal properties of)
RN 128940-28-3 HCAPLUS
CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 25 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:196879 HCAPLUS
DOCUMENT NUMBER: 114:196879
TITLE: Columnar liquid crystals in oligosaccharide derivatives. I. Discotic columnar liquid crystals in cellobiose octadecanoate and cellotriose hendecadecanoate
AUTHOR(S): Itoh, T.; Takada, A.; Fukuda, T.; Miyamoto, T.; Yakoh, Y.; Watanabe, J.
CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Kyoto, 611, Japan
SOURCE: Liquid Crystals (1991), 9(2), 221-8
CODEN: LICRE6; ISSN: 0267-8292
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cellobiose octadecanoate and celotriose hendecadecanoate were synthesized and their mesophase properties studied. Both ester derivs. show enantiotropic mesophases below 100.degree.. From the observations of microscopic texture and x-ray pattern, the mesophase is hexagonal columnar, in which the column is built up by a periodic stacking of the cellobiose or cellotriose skeleton and packed into a 2-dimensional hexagonal lattice. The mesophase is thus similar to the hexagonal ordered columnar phase in a class of discotics, indicating that cellobiose and cellotriose moieties can work as discotic mesogens.
CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 32
IT **128940-28-3P 133544-34-0P**

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(liq. crystal, prepn. and discotic columnar structure of)

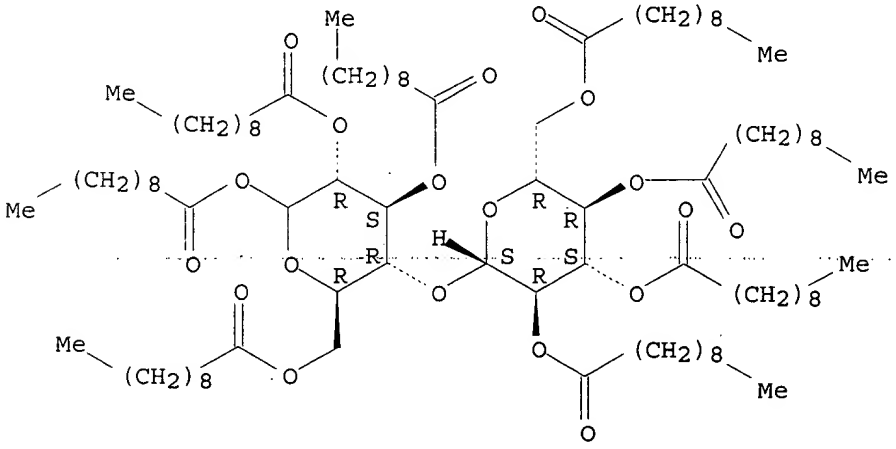
IT **128940-28-3P 133544-34-0P**

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(liq. crystal, prepn. and discotic columnar structure of)

RN 128940-28-3 HCAPLUS

CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

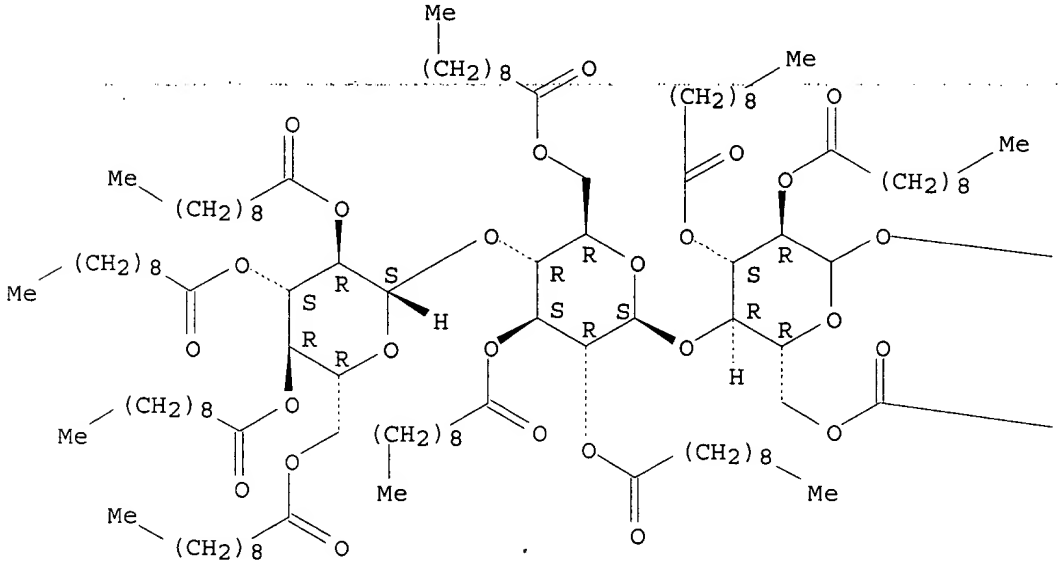


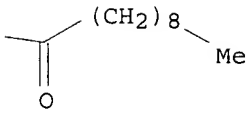
RN 133544-34-0 HCAPLUS

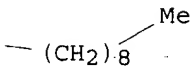
CN D-Glucopyranose, O-2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-O-2,3,6-tris-O-(1-oxodecyl)-.beta.-D-glucopyranosyl-(1.fwdarw.4)-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A







L10 ANSWER 26 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1991:60717 HCAPLUS
DOCUMENT NUMBER: 114:60717
TITLE: Alkyl glycoside fatty acid polyesters as fat substitutes
INVENTOR(S): Winter, Daryl B.; Meyer, Richard S.; Root, Jeffrey M.; Campbell, Michael L.
PATENT ASSIGNEE(S): Curtice-Burns, Inc., USA
SOURCE: U.S., 10 pp. Cont.-in-part of U.S. 4,840,815.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4942054	A	19900717	US 1989-347264	19890503
US 4840815	A	19890620	US 1987-122188	19871118
US 4840815	B1	19970930		
WO 9013555	A1	19901115	WO 1989-US2222	19890522
W: AU, JP, SU				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8937515	A1	19901129	AU 1989-37515	19890522
WO 9013556	A1	19901115	WO 1989-US2679	19890619
W: AU, JP, SU				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8944809	A1	19901129	AU 1989-44809	19890619
EP 423246	A1	19910424	EP 1989-911975	19890619
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 04500975	T2	19920220	JP 1989-511122	19890619
CA 1330078	A1	19940607	CA 1989-603212	19890619
AU 9065476	A1	19920317	AU 1990-65476	19900822
US 5550220	A	19960827	US 1994-359942	19941220

PRIORITY APPLN. INFO.: US 1987-49625 19870513
US 1987-122188 19871118

AB (N-alkyl .beta.-D-cellobioside) hepta-n-alkanoates with varying lengths of alkyl and alkanoyl chains were synthesized via 4 steps starting with D-cellobiose octaacetate. These new compds. form a thermotropic liq.-crystal phase of smectic type when the alkyl and alkanoyl lengths are appropriate. A rather minor difference in mol. structure, e.g., an ether vs. ester linkage at the 1-O position, could bring about a considerable difference in the temp. span or the stability of the mesophase.

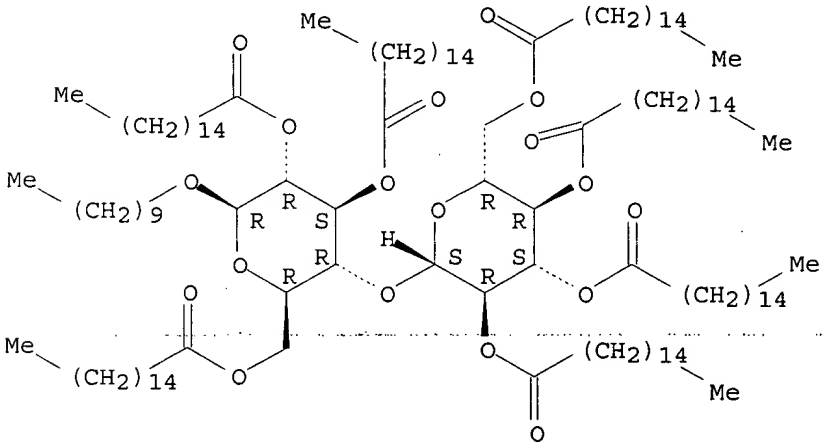
CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 6

IT 120907-49-5 **129530-33-2** 129530-34-3 **129530-35-4**
129530-36-5 **129530-37-6** **129530-38-7**
129530-39-8 **129530-40-1** **129530-41-2**
129530-42-3 **129530-43-4** **129530-44-5**
129530-45-6 **129555-15-3**
RL: PRP (Properties)
(liq. crystal properties of)

IT **129530-33-2** **129530-35-4** **129530-36-5**
129530-37-6 **129530-38-7** **129530-39-8**
129530-40-1 **129530-41-2** **129530-42-3**
129530-43-4 **129530-44-5** **129530-45-6**
129555-15-3
RL: PRP (Properties)
(liq. crystal properties of)

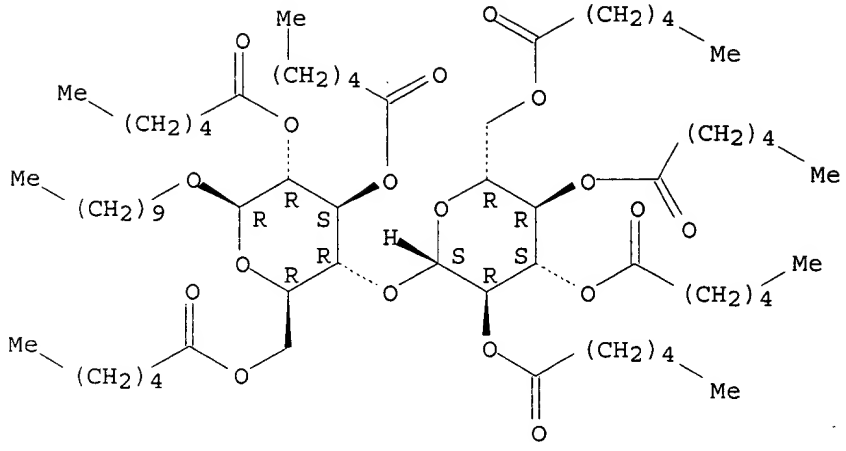
RN 129530-33-2 HCAPLUS
CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxohexadecyl)-.beta.-D-glucopyranosyl]-, trihexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



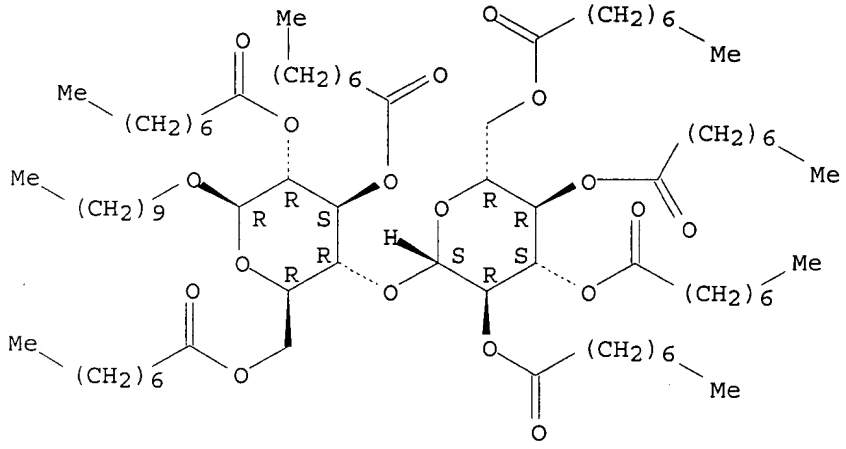
RN 129530-35-4 HCAPLUS
CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxohexyl)-.beta.-D-glucopyranosyl]-, trihexanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



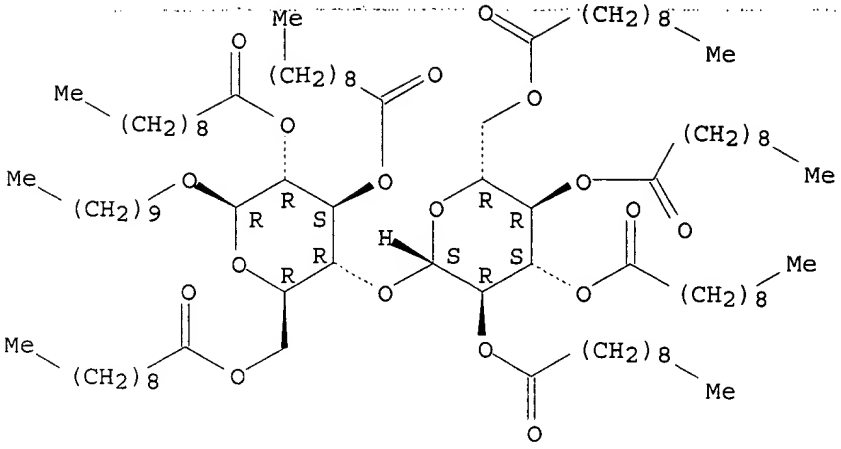
RN 129530-36-5 HCAPLUS
CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, trioctanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



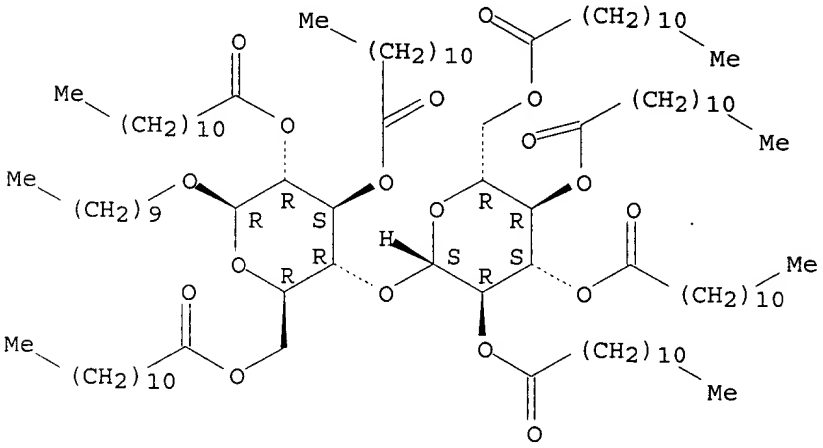
RN 129530-37-6 HCAPLUS
CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tris(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



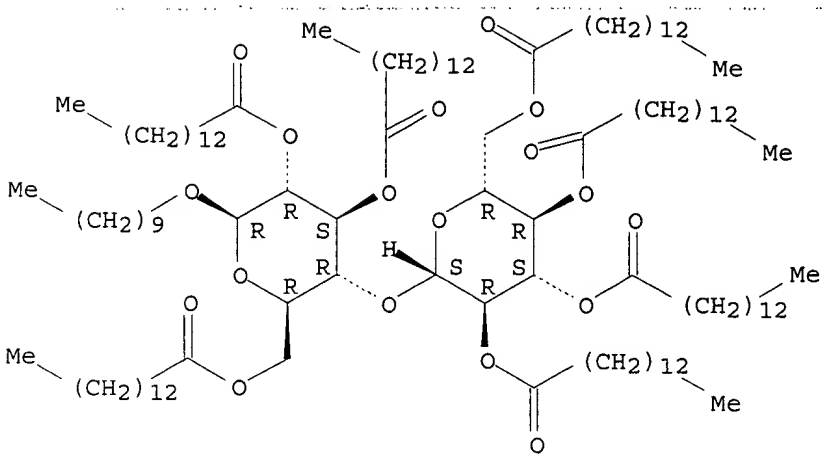
RN 129530-38-7 HCAPLUS
CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tridodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



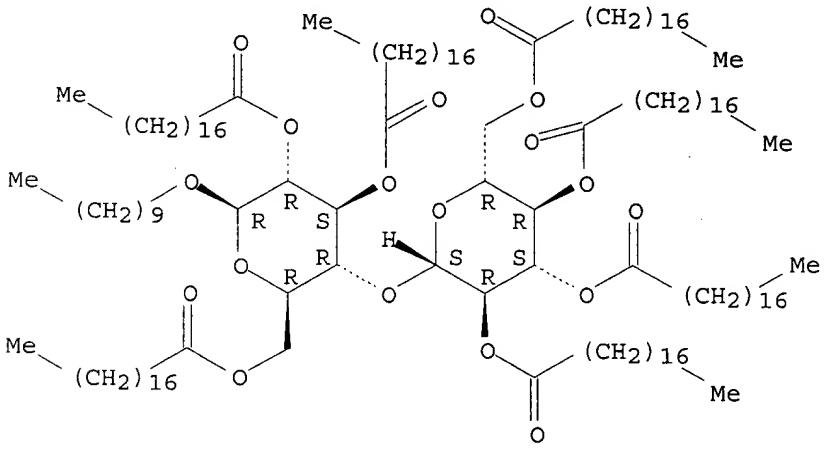
RN 129530-39-8 HCAPLUS
CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxotetradecyl)-.beta.-D-glucopyranosyl]-, tritetradecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



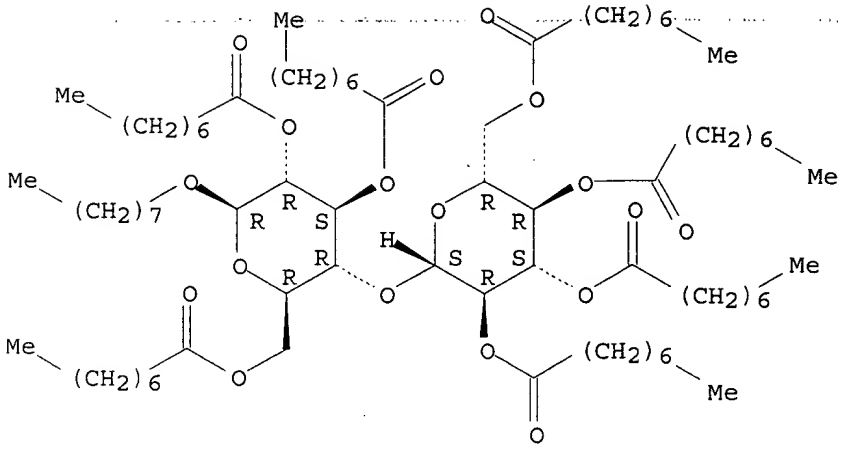
RN 129530-40-1 HCAPLUS
CN .beta.-D-Glucopyranoside, decyl 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-glucopyranosyl]-, trioctadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



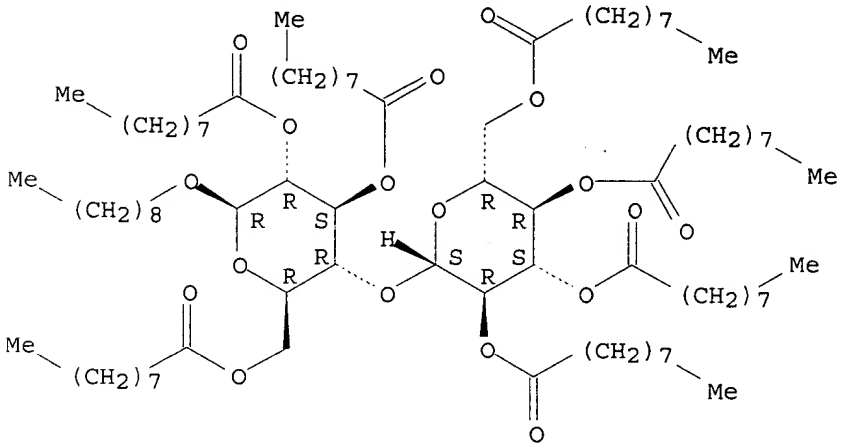
RN 129530-41-2 HCAPLUS
CN .beta.-D-Glucopyranoside, octyl 4-O-[2,3,4,6-tetrakis-O-(1-oxooctyl)-.beta.-D-glucopyranosyl]-, trioctanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



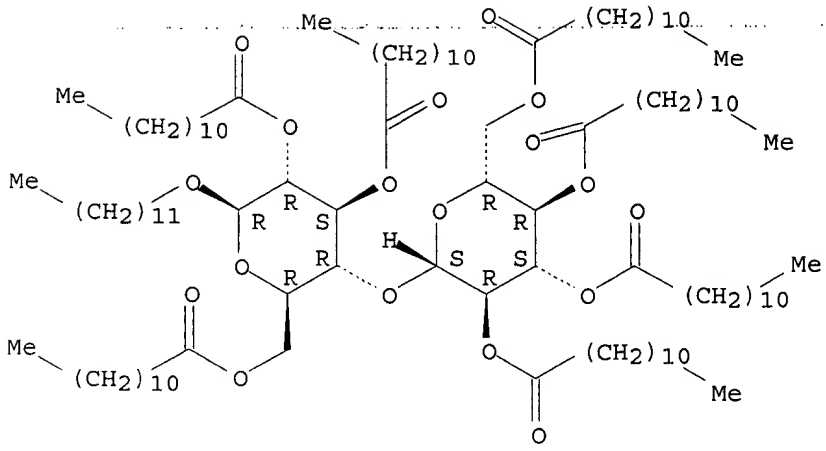
RN 129530-42-3 HCAPLUS
CN .beta.-D-Glucopyranoside, nonyl 4-O-[2,3,4,6-tetrakis-O-(1-oxononyl)-.beta.-D-glucopyranosyl]-, trinonanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



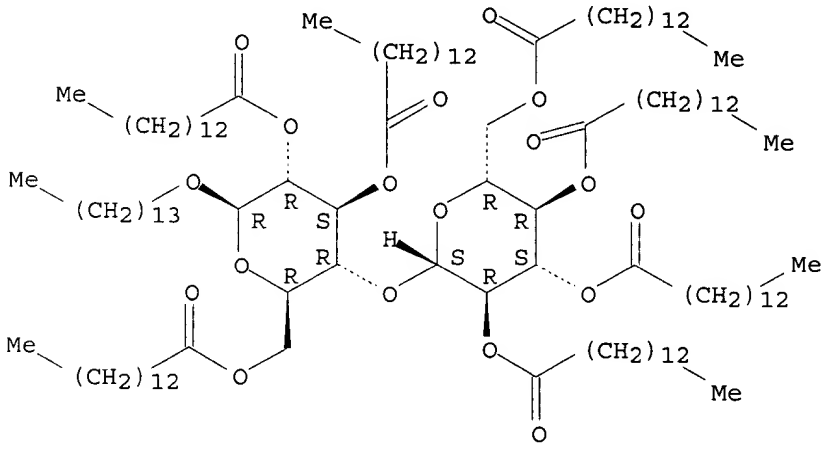
RN 129530-43-4 HCAPLUS
CN .beta.-D-Glucopyranoside, dodecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxododecyl)-.beta.-D-glucopyranosyl]-, tridodecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



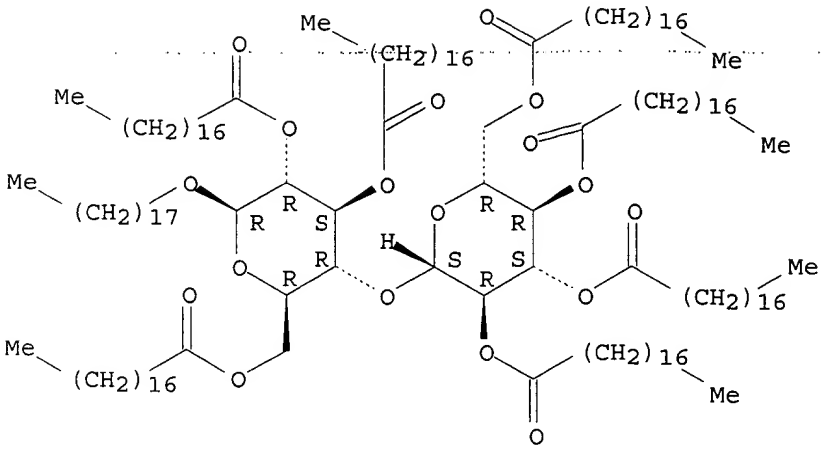
RN 129530-44-5 HCAPLUS
CN .beta.-D-Glucopyranoside, tetradecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxotetradecyl)-.beta.-D-glucopyranosyl]-, tritetradecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



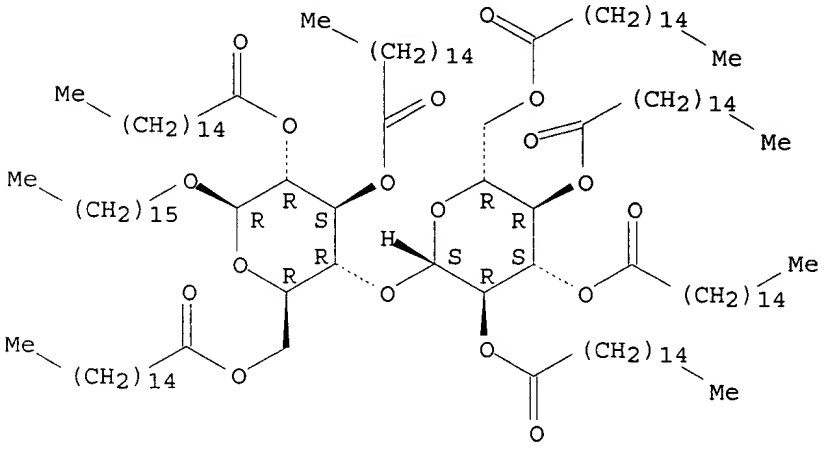
RN 129530-45-6 HCAPLUS
CN .beta.-D-Glucopyranoside, octadecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-glucopyranosyl]-, trioctadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 129555-15-3 HCAPLUS
CN .beta.-D-Glucopyranoside, hexadecyl 4-O-[2,3,4,6-tetrakis-O-(1-oxohexadecyl)-.beta.-D-glucopyranosyl]-, trihexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 28 OF 28 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:499637 HCAPLUS
DOCUMENT NUMBER: 113:99637
TITLE: Preparation and monolayer films of cellobiose alkyl esters
AUTHOR(S): Itoh, Takahiro; Matsumoto, Mutsuo; Suzuki, Hidematsu; Miyamoto, Takeaki
CORPORATE SOURCE: Tokai Senko K. K., Kyoto, 604, Japan
SOURCE: Bulletin of the Institute for Chemical Research, Kyoto University (1990), 68(1), 53-62
CODEN: BICRAS; ISSN: 0023-6071
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cellobiose octa(decanoate) and cellobiose octa(octadecanoate) are prepd. and used for studies on formation and fine structure of monolayers at the

US	1989-347264	19890503
WO	1989-US2222	19890522
US	1989-368675	19890619
WO	1989-US2679	19890619
WO	1990-US4769	19900822
US	1991-770771	19911004
US	1992-869288	19920415

AB Alkyl glycoside fatty acid polyesters with .gtoreq.4 ester groups are used as fat substitutes for frying and as components of foods (e.g. salad dressings). Et 4'-galactosyl lactose polyoleate was prepd. by Na catalyzed inter-esterification of Et 4'-galactosyl lactose decaacetate and Me oleate. This was used as a fat substitute in salad dressings to give a product with satisfactory flavor and texture.

IC ICM A23D005-00

NCL 426611000

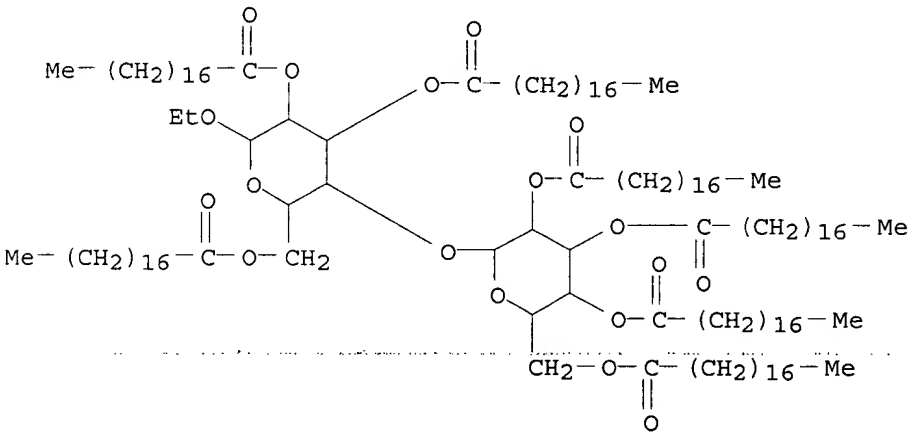
CC 17-9 (Food and Feed Chemistry)

IT 555-44-2 39024-75-4, Sucrose octapalmitate 124450-50-6 124606-47-9 **131662-24-3**
RL: BIOL (Biological study)
(as fat substitute in deep-frying)

IT **131662-24-3**
RL: BIOL (Biological study)
(as fat substitute in deep-frying)

RN 131662-24-3 HCAPLUS

CN D-Glucopyranoside, ethyl 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-galactopyranosyl]-, trioctadecanoate (9CI) (CA INDEX NAME)



L10 ANSWER 27 OF 28 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:	1990:542720 HCAPLUS
DOCUMENT NUMBER:	113:142720
TITLE:	Cellobiose-based liquid crystals. (n-Alkyl .beta.-D-cellobioside) hepta-n-alkanoates
AUTHOR(S):	Takada, Akihiko; Ma, Yung Dae; Fukuda, Takeshi; Miyamoto, Takeaki
CORPORATE SOURCE:	Inst. Chem. Res., Kyoto Univ., Uji, 611, Japan
SOURCE:	Bulletin of the Institute for Chemical Research, Kyoto University (1990), 68(1), 21-9 CODEN: BICRAS; ISSN: 0023-6071
DOCUMENT TYPE:	Journal
LANGUAGE:	English

air-water interface. The surface pressure (.pi.)-area (A) isotherms of monolayers of these cellobiose esters are similar to those of the corresponding cellulose esters previously reported, when A is expressed in nm2 per alkyl chain instead of per glucose unit. Under electron microscopic examns. of the monolayers transferred from the water surface, the monolayers of the two cellobiose esters are inhomogeneous. This makes a sharp contrast to the fact that the cellulose esters, considered as the polymers of these cellobiose esters, form homogeneous monolayers. These results are discussed in comparison with those of stearic acid.

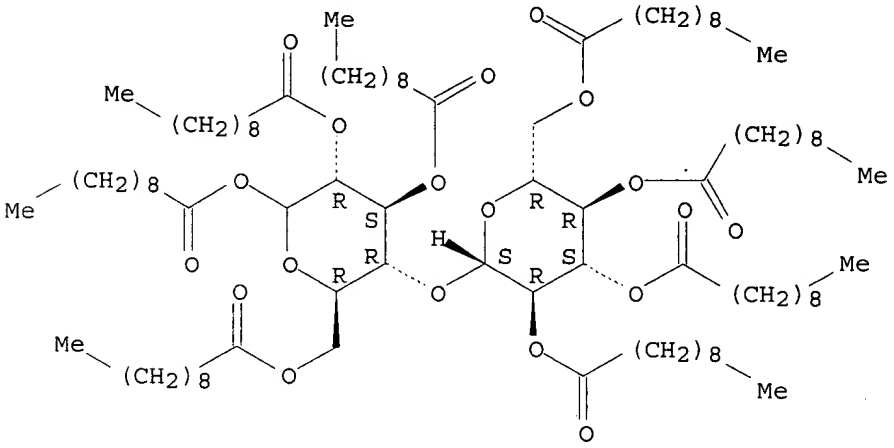
CC 43-3 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 33

IT **128940-28-3P 128968-01-4P**
RL: PREP (Preparation)
(monolayer films of, prepn. and fine structure of, at air-water interface)

IT **128940-28-3P 128968-01-4P**
RL: PREP (Preparation)
(monolayer films of, prepn. and fine structure of, at air-water interface)

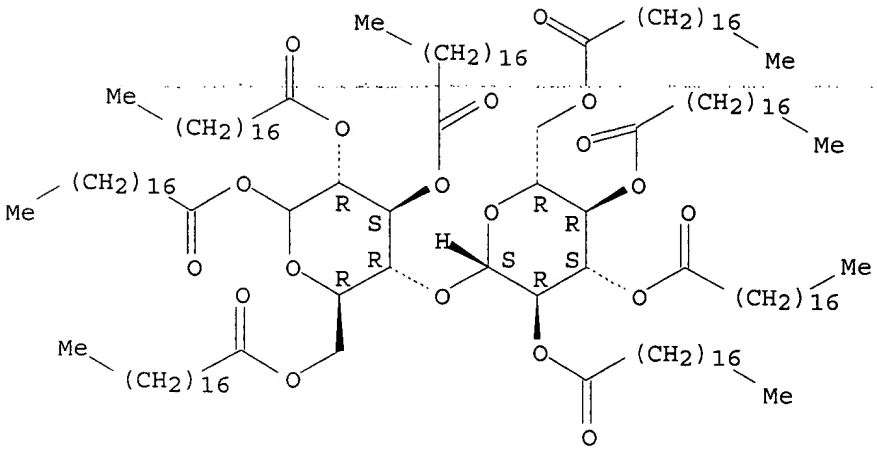
RN 128940-28-3 HCAPLUS
CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxodecyl)-.beta.-D-glucopyranosyl]-, tetrakis(decanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 128968-01-4 HCAPLUS
CN D-Glucopyranose, 4-O-[2,3,4,6-tetrakis-O-(1-oxooctadecyl)-.beta.-D-glucopyranosyl]-, tetraoctadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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=> d que nos l17
L1              STR
L2  (       383)SEA FILE=REGISTRY SSS FUL L1
L3          371 SEA FILE=REGISTRY ABB=ON  PLU=ON  L2/COMP
L4              STR
L5              STR
L6  (       383)SEA FILE=REGISTRY SSS FUL L5
L7  (       371)SEA FILE=REGISTRY ABB=ON  PLU=ON  L6/COMP
L8          102 SEA FILE=REGISTRY SUB=L7 SSS FUL L4
L9          175 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3
L10          28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8
L11      107079 SEA FILE=HCAPLUS ABB=ON  PLU=ON  COSMET?/OBI OR 62/SX,SC
L12         147 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 NOT L10
L13           5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12 AND L11
L14          12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12 AND 63/SX,SC
L15          16 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L14 OR L13
L16      439726 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CREAM OR LOTION OR OINTMENT#
                OR TOPICAL OR WATER (3A) IMMISCIB? OR GELLANT? OR ANTIPERSP?
                OR EMULSION OR SKIN
L17           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 AND L15


=> d .ca hitstr l17 1-3

L17  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:         2001:279402  HCAPLUS
DOCUMENT NUMBER:          134:300637
TITLE:                    Use of DHEA or its precursors and metabolites as
                          skin depigmentation agents
INVENTOR(S):              De, Lacharriere Oliver; Nouveau, Stephanie
PATENT ASSIGNEE(S):       L'oreal, Fr.
SOURCE:                   Eur. Pat. Appl., 10 pp.
                          CODEN: EPXXDW
DOCUMENT TYPE:            Patent
LANGUAGE:                 French
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.   DATE
     ---------------   ----  --------       ---------------   --------
     EP 1092423         A2   20010418       EP 2000-118605    20000828
     EP 1092423         A3   20010829
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     FR 2799645         A1   20010420       FR 1999-12773     19991013
     JP 2001131072      A2   20010515       JP 2000-303977    20001003
     WO 2001026618      A2   20010419       WO 2000-FR2879    20001013
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     FR 2803514         A1   20010713       FR 2000-13184     20001013
     EP 1221933         A2   20020717       EP 2000-968050    20001013
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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IE, SI, LT, LV, FI, RO, MK, CY, AL
PRIORITY APPLN. INFO.: FR 1999-12773 A 19991013
WO 2000-FR2879 W 20001013

AB DHEA (dehydroepiandrosterone) or its precursors and metabolites as **skin** depigmentation agents. A cosmetic compn. contained DHEA 2, propylene glycol isostearate 13, polyethylene glycol 5, propylene glycol 3, pentylene glycol 3, glyceryl stearate and polyethylene glycol stearate 5, ethoxylated sorbitan monostearate 0.5, ethoxylated cetyl alc. 1, gelling agents 0.5, C12-15 alkyl benzoate 4, ethanol 3, sodium hydroxide 0.12, preservatives 0.7, and water q.s. 100%. Depigmentation activity of the compn. was tested in 55-70 yr volunteers.

IC ICM A61K007-48
ICS A61P017-12

CC **62-4** (Essential Oils and Cosmetics)

ST DHEA metabolite **skin** depigmentation **cosmetic**

IT **Skin**, disease
(depigmentation; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)

IT Carbohydrates, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(derivs.; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)

IT Licorice (Glycyrrhiza)
Mulberry
Scutellaria
(ext.; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)

IT Carboxylic acids, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hydroxy; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)

IT Carboxylic acids, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oxo; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)

IT **Cosmetics**
(**skin**-lightening; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)

IT **Cosmetics**
Sunscreens
(use of DHEA or its precursors and metabolites as **skin** depigmentation agents)

IT Polysiloxanes, biological studies
Retinoids
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(use of DHEA or its precursors and metabolites as **skin** depigmentation agents)

IT 9028-35-7, HMG-CoA reductase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; use of DHEA or its precursors and metabolites as **skin** depigmentation agents)

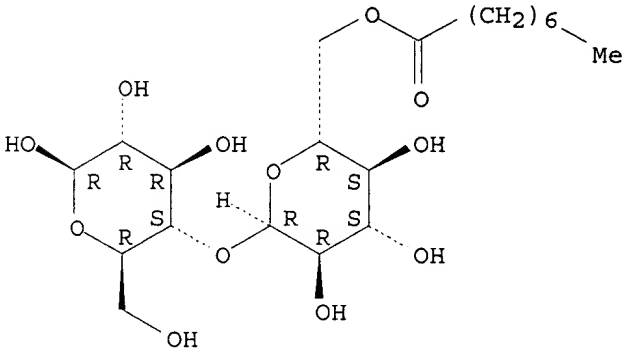
IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, biological studies 53-43-0, DHEA 57-88-5, Cholesterol, biological studies 63-05-8, 4-Androstene-3-17 dione 68-26-8, Retinol 68-26-8D, Retinol, esters 69-72-7, Salicylic acid, biological studies 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological

studies 87-69-4, Tartaric acid, biological studies 90-64-2, Mandelic acid 120-46-7D, Dibenzoylmethane, derivs. 123-31-9, Hydroquinone, biological studies 131-57-7, 2-Hydroxy 4 methoxybenzophenone 145-13-1, Pregnenolone 387-79-1, 17-Hydroxypregnenolone 476-66-4, Ellagic acid 497-76-7D, Arbutine, derivs. 501-30-4, Kojic acid 521-17-5, 5 Androstenediol 651-48-9, Dhea sulfate 4065-45-6, 2 Hydroxy 4 methoxybenzophenone 5 sulfonic acid 6197-30-4, Octocrylene 6915-15-7, Malic acid 7159-95-7 10380-41-3D, 2-Cyano-3,3-diphenylacrylic acid, alkyl derivs. 15087-24-8, Benzylidene camphor 16397-78-7, 2-Ethyl hexyl cinnamate 19771-63-2, Procysteine 19771-63-2D, Procysteine, esters 25654-87-9 27503-81-7, 2-Phenylbenzimidazole 5 sulfonic acid 27598-85-2D, Aminophenol, derivs. 28901-70-4, 17.alpha.-Hydroxypregnenolone sulfate 36861-47-9 63250-25-9, 4-(Isopropyl)dibenzoylmethane 70356-09-1 88122-99-0 155633-54-8 189746-43-8 220717-78-2 **334658-18-3**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(use of DHEA or its precursors and metabolites as **skin** depigmentation agents)

IT **334658-18-3**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(use of DHEA or its precursors and metabolites as **skin** depigmentation agents)

RN 334658-18-3 HCAPLUS
CN .beta.-D-Glucopyranose, 4-O-[6-O-(1-oxooctyl)-.alpha.-D-glucopyranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L17 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2002 ACS

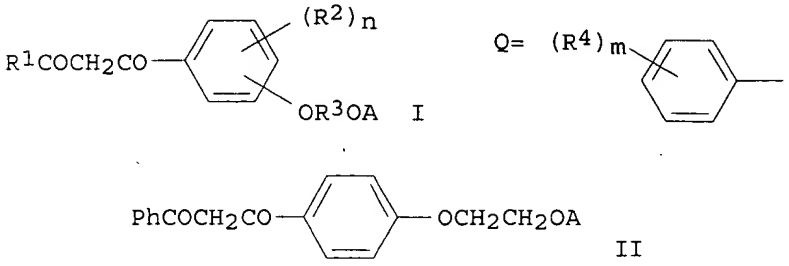
ACCESSION NUMBER:	1996:81485 HCAPLUS
DOCUMENT NUMBER:	124:146725
TITLE:	Preparation of glycosides of 1-(hydroxyalkoxyphenyl)-1,3-propanedione derivatives as UV-absorbing agents and **topical skin** protectant containing them
INVENTOR(S):	Kato, Mikiko; Matsushita, Yasushi; Okazaki, Tomomi
PATENT ASSIGNEE(S):	Shiseido Co., Ltd., Japan
SOURCE:	Jpn. Kokai Tokkyo Koho CODEN: JKXXAF
DOCUMENT TYPE:	Patent
LANGUAGE:	Japanese
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07242693	A2	19950919	JP 1994-64639	19940307

OTHER SOURCE(S): MARPAT 124:146725

GI



AB The title compds. [I; R1 = linear or branched and (un)satd. C1-8 alkyl, Q; R2, R4 = H, OH, C1-8 alkyl or alkoxy; n, m = 1-3; R3 =alkylene; A = group residue derived by removing 1 HO group for a sugar], which have excellent UV-absorbing property and high soly. in the polar solvent phase, are prepd. Thus, p-hydroxyacetophenone was alkylated by 2-chloroethanol in the presence of K2CO3 in DMF at 80.degree. for 3 h to give 4-(2-hydroxyethoxy)acetophenone which was condensed with Me benzoate in the presence of NaH in DMF at 20.degree. for 15 min and 50.degree. for 3 h to give 3-phenyl-1,3-propanedione deriv. (II; A = H). The latter compd. was glycosidated by peracetylmaltose in the presence of phosphomolybdic acid n-hydrate in diethylene glycol di-Bu ether at 95.degree. and 12 mmHg to give the peracetylmaltoside II (A = peracetylmaltosyl) which was treated with NaOMe in MeOH at room temp. for 5 h and neutralized with Amberlite IR120B to give the title compd. II (A = maltosyl). A **skin** care liq. contg. the latter compd. showed excellent **skin** protection against sunburn for male female panelists in a beach and gave neither **skin** itchiness nor rash.

IC ICM C07H015-18
ICS A61K007-00; A61K007-42; A61K007-48; A61K031-70; C09K003-00

CC 33-3 (Carbohydrates)
Section cross-reference(s): **62**

ST glycoside hydroxyalkoxyphenylpropanedione prepn UV absorbing agent; **topical skin** protectant

IT **Cosmetics**
Ultraviolet radiation
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as UV-absorbing agents and **topical skin** protectant contg. them)

IT 173060-97-4P **173060-98-5P** 173060-99-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as UV-absorbing agents and **topical skin** protectant contg. them)

IT 99-93-4, p-Hydroxyacetophenone 107-07-3, 2-Chloroethanol, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as

UV-absorbing agents and **topical skin** protectant contg. them)

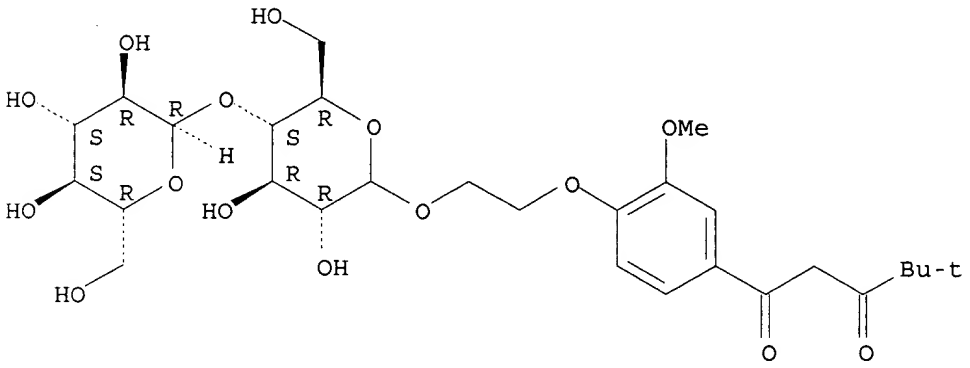
IT 75-97-8P, 3,3-Dimethyl-2-butanone 83-87-4P, Peracetylglucose 93-58-3P, Methyl benzoate 617-05-0P, Ethyl 3-methoxy-4-hydroxybenzoate 20880-60-8P 91555-86-1P, Ethyl 3-methoxy-4-(2-hydroxyethoxy)benzoate 99215-51-7P, 4-(2-Hydroxyethoxy)acetophenone 173061-00-2P 173061-01-3P 173061-02-4P **173061-03-5P** 173061-04-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as UV-absorbing agents and **topical skin** protectant contg. them)

IT **173060-98-5P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as UV-absorbing agents and **topical skin** protectant contg. them)

RN 173060-98-5 HCAPLUS

CN 1,3-Pentanedione, 1-[4-[2-[(4-O-.alpha.-D-glucopyranosyl-D-glucopyranosyl)oxy]ethoxy]-3-methoxyphenyl]-4,4-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

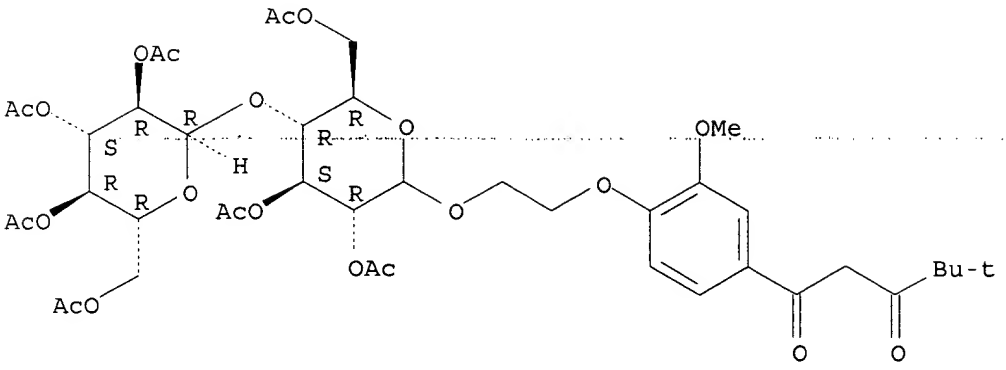


IT **173061-03-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of glycosides of (hydroxyalkoxyphenyl)propanedione derivs. as UV-absorbing agents and **topical skin** protectant contg. them)

RN 173061-03-5 HCAPLUS

CN 1,3-Pentanedione, 1-[3-methoxy-4-[2-[[2,3,6-tri-O-acetyl-4-O-(2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranosyl)-D-glucopyranosyl]oxy]ethoxy]phenyl]-4,4-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L17 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:121101 HCAPLUS
DOCUMENT NUMBER: 110:121101
TITLE: **Skin** conditioners containing alkanolamides and amino alcohols
INVENTOR(S): Yano, Shinji; Kawamata, Akira; Minematsu, Yoshihiro; Akazaki, Shuichi; Zama, Mitsuko; Imokawa, Genji; Takaishi, Naotake; Ohtomo, Tsuyoshi; Komori, Takashi
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: Eur. Pat. Appl., 53 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 282816	A2	19880921	EP 1988-103177	19880302
EP 282816	A3	19910403		
EP 282816	B1	19930915		
R: DE, ES, FR, GB, IT				
JP 63216812	A2	19880909	JP 1987-51276	19870306
JP 06092293	B4	19941116		
JP 63218609	A2	19880912	JP 1987-53769	19870309
JP 06092294	B4	19941116		
JP 63222107	A2	19880916	JP 1987-56049	19870311
JP 06092295	B4	19941116		
JP 63227513	A2	19880921	JP 1987-60718	19870316
JP 06092296	B4	19941116		
JP 63227514	A2	19880921	JP 1987-60719	19870316
JP 06092297	B4	19941116		
JP 63297309	A2	19881205	JP 1987-132054	19870528
JP 06092298	B4	19941116		
JP 01009905	A2	19890113	JP 1987-163682	19870630
JP 06069930	B4	19940907		
JP 01009906	A2	19890113	JP 1987-163683	19870630
JP 06069931	B4	19940907		
JP 01009907	A2	19890113	JP 1987-163685	19870630
JP 06069932	B4	19940907		
EP 534286	A1	19930331	EP 1992-115766	19880302
EP 534286	B1	19950802		
R: DE, ES, FR, GB, IT				

ES 2077948	T3	19951201	ES 1992-115766	19880302
US 4985547	A	19910115	US 1988-163835	19880303
JP 01079195	A2	19890324	JP 1988-133426	19880531
US 5028416	A	19910702	US 1990-546276	19900629
US 5071971	A	19911210	US 1990-584739	19900919

PRIORITY APPLN. INFO.: JP 1987-51276 19870306
JP 1987-53769 19870309
JP 1987-56049 19870311
JP 1987-60718 19870316
JP 1987-60719 19870316
JP 1987-132054 19870528
JP 1987-138727 19870602
JP 1987-163682 19870630
JP 1987-163683 19870630
JP 1987-163685 19870630
US 1988-163835 19880303

OTHER SOURCE(S): MARPAT 110:121101

AB **Skin**-care cosmetics contain fatty alkanolamides or amino alcs. The alkanolamides comprise R1CONACH2B [I; R1 = aliph. hydrocarbyl; A = (CH2)lH (l = 3-6); CX1X2CHX3OH (X1-X3 = H, alkyl, hydroxyalkyl); (CH2CH2O)mH (m = 1, 2); CHR2CO2Y (Y = H, alkali metal; R2 = H, Me, PhCH2, Me2CH, Me2CHCH2, EtMeCHCH2, HOCH2, MeCH(OH), MeSCH2CH2, YO2CCH2, YO2CCH2CH2, 4-HOC6H4CH2, imidazol-4-ylmethyl, indol-3-ylmethyl, CH2CH2OR3 where R3 = sugar residue, P(O)(O-)OCH2CH2N+Z1Z2Z3 where Z1-Z3 = H, alkyl, aralkyl); B = CH(OR4)CH2OR5 (R4 = H, sugar residue, P(O)(O-)CH2CH2N+Z1Z2Z3, (CH2CH2O)nH where n = .gtoreq.1; R5 = aliph. hydrocarbyl, CHOHR5; with the proviso that X1-X3 and R4 may not be H the same time]. The amino alcs. comprise R6OCH2CH(OH)CH2NR8CH2CH(OH)CH2OR7 (II; R6, R7 = aliph. hydrocarbyl; R8 = CH2CH2OH, CH2CO2H, Ac). Several I are prepd. The cosmetics presented here enhance the moisture-retaining ability of the **skin** and relieve roughness of the **skin**. II were applied to rough **skin** for 2 wk and **skin** roughness was scored from 0 (no roughness) to 5 (severely rough **skin**); the score was 0.9 for II (R6 = R7 = n-C18H37, R6 = CH2CH2OH) (III) alone, 0.1-0.7 for III when incorporated in a formulations. An **emulsion** type cosmetic foundation contained III 3.0, stearic acid 5.0, cetostearyl alc. 1.0, jojoba oil 15.0, glycerol monostearate 2.0, propylene glycol monolaurate 3.0, propylene glycol 4.0, triethanolamine 1.2, methylparaben 0.3, perfume 0.1, TiO2 8.0, talc 4.0, Fe oxide 0.5, and H2O to 100% by wt.

IC ICM A61K007-48

CC **62-4** (Essential Oils and Cosmetics)
Section cross-reference(s): 23, 33

ST **skin** conditioner alkanolamide amino alc

IT Alcohols, biological studies
RL: BIOL (Biological study)
(amino, **skin** conditioning **cosmetics** contg.)

IT **Cosmetics**
(conditioners, contg. alkanolamide derivs. and alkanolamine derivs.)

IT Amides, biological studies
RL: BIOL (Biological study)
(N,N-bis(hydroxyalkyl), **skin**-conditioning **cosmetics** contg.)

IT 119094-10-9P 119094-12-1P **119094-13-2P** 119094-16-5P
119094-23-4P 119094-24-5P 119094-25-6P 119094-27-8P 119094-28-9P
119094-31-4P
RL: PREP (Preparation)
(prepn. of, as **skin** conditioner)

IT 65212-53-5 119093-57-1 119093-58-2 119093-59-3 119093-60-6
119093-61-7 119093-62-8 119093-63-9 119093-64-0 119093-65-1
119093-66-2 119093-67-3 119093-68-4 119093-69-5 119093-70-8

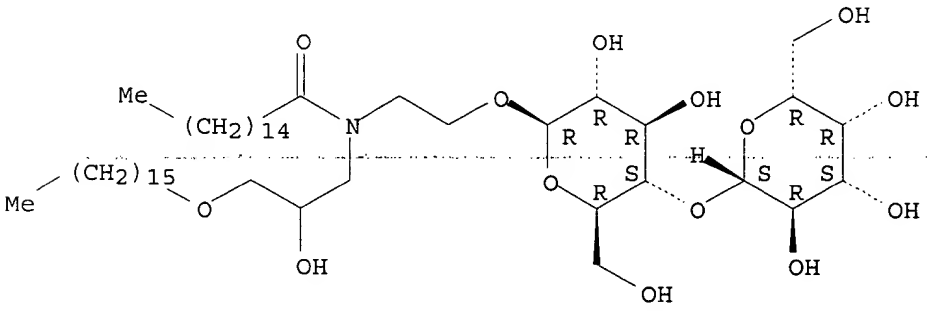
119093-71-9 119093-72-0 119093-73-1 119093-74-2 119093-75-3
119093-76-4 119093-77-5 119093-78-6 119093-79-7 119093-80-0
119093-81-1 119093-82-2 119093-83-3 119093-84-4 119093-85-5
119093-86-6 119093-87-7 119093-88-8 119093-89-9 119093-90-2
119093-91-3 119093-92-4 119093-93-5 119093-94-6 119093-95-7
119093-96-8 119093-97-9 119093-98-0 119093-99-1 119094-00-7
119094-01-8 119094-02-9 119094-03-0 119094-04-1 119094-05-2
119094-06-3 119094-07-4 119094-08-5 119094-09-6 119135-32-9
119135-33-0 119135-34-1 119135-35-2 119135-36-3
RL: BIOL (Biological study)
(**skin** conditioning **cosmetics** contg.)

IT **119094-13-2P**
RL: PREP (Preparation)
(prepn. of, as **skin** conditioner)

RN 119094-13-2 HCAPLUS

CN Hexadecanamide, N-[2-[(4-O-.beta.-D-galactopyranosyl-.beta.-D-glucopyranosyl)oxy]ethyl]-N-[3-(hexadecyloxy)-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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FILE LAST UPDATED:          13 NOV 2002      <20021113/UP>
MOST RECENT DERWENT UPDATE:    200273        <200273/DW>
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    PLEASE VISIT:
 http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
    GUIDES, PLEASE VISIT:
    http://www.derwent.com/userguides/dwpi_guide.html <<<

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               DEL HIS Y
L1           445 S CELLOBIOSE
L2             1 S L1 (4A) ACYLAT?
L3            10 S L1 (4A) (ACYL? OR ACETYL?)
L4            10 S L3 OR L2
L5            10 S L1 (7A) (ACYL OR ACETYL OR ACETYLAT? OR ACYLAT?)
L6            10 S L5 OR L2
L7             1 S  HEPTADECANOAT?  (S) L1
L8            10 S L7 OR L6

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L5            10 SEA FILE=WPIDS ABB=ON  PLU=ON  L1 (7A) (ACYL OR ACETYL OR
                 ACETYLAT? OR ACYLAT?)
L6            10 SEA FILE=WPIDS ABB=ON  PLU=ON  L5 OR L2
L7             1 SEA FILE=WPIDS ABB=ON  PLU=ON  HEPTADECANOAT?  (S) L1
L8            10 SEA FILE=WPIDS ABB=ON  PLU=ON  L7 OR L6

=> d .wp 1-10

L8   ANSWER 1 OF 10  WPIDS (C) 2002 THOMSON DERWENT
AN   2002-426445 [45]   WPIDS
DNC  C2002-120917
TI   New acylated cellobiose useful as structurant or
     thickener for water-immiscible carrier liquid in e.g. cosmetic
     formulations.
DC   D21 E13
IN   FRANKLIN, K R; HOPKINSON, A; WEBB, N; WHITE, M S
PA   (UNIL) UNILEVER HOME & PERSONAL CARE USA DIV CO; (UNIL) HINDUSTAN LEVER
     LTD; (UNIL) UNILEVER NV; (UNIL) UNILEVER PLC
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CYC 97
PI WO 2002032914 A2 20020425 (200245)* EN 94p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
US 2002072506 A1 20020613 (200246)
AU 2001093827 A 20020429 (200255)
ADT WO 2002032914 A2 WO 2001-EP10869 20010918; US 2002072506 A1 US 2001-982077 20011017; AU 2001093827 A AU 2001-93827 20010918
FDT AU 2001093827 A Based on WO 200232914
PRAI GB 2000-25437 20001017
AB WO 200232914 A UPAB: 20020717
NOVELTY - **Acylated cellobiose** (I) is new.
DETAILED DESCRIPTION - An **acylated cellobiose** of formula (I) is new.
X = acyl, -R-CO- or H;
Z = acyl, R'-CO- or H.
Not more than a minority of R + R' residues represent H. In the remaining R + R' residues, R is 5-31C hydrocarbon residue, and R' is an optionally substituted aromatic hydrocarbon residue, 1-31C hydrocarbon residue or cycloaliphatic hydrocarbon residue.
INDEPENDENT CLAIMS are included for the following:
(a) A method of preparing **acylated cellobiose** (I); and
(b) A method of thickening or structuring a water-immiscible liquid to form a cream, soft solid or solid composition. The water-immiscible liquid is thickened or structured by forming a solution of a gellant in the liquid at a temperature above its gelling temperature. The resulting solution is then cooled to and maintained at below its gelling temperature until its viscosity has increased, or until it has solidified. The gellant comprises **acylated cellobiose** (I).
USE - Structurant or thickener for a water-immiscible carrier liquid, e.g. a phase in a cosmetic formulation such as antiperspirant or deodorant formulations, especially transparent or translucent water-in-oil emulsions.
ADVANTAGE - (I) increases storage stability and resistance against in situ crystallization of cosmetic compositions.
Dwg.0/0
TECH UPTX: 20020717
TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preparation (claimed): (I) is prepared by reacting an **acylated cellobiose** of formula (II) with an **acylating** agent containing the residue R' at the anomeric carbon.
Preferred Compound: The **acylated cellobiose** may be **cellobiose** heptanonanoate monobenzoate, mononaphthanoate, monoethanoate or monocyclohexanoate, or **cellobiose heptadecanoate** monobenzoate, monobiphenyloate, monoethanoate or monocyclohexanoate.
Preferred Composition: The major fraction (preferably at least 90%) of the **acylated cellobiose** is alpha-anomer or beta-anomer. The gellant is present in the cream, soft solid or solid composition at 0.5-15 wt.%. The cream, soft solid or solid composition further includes active agent(s) consisting of skin benefit agents, personal care agents, medicaments, sunscreen or tanning aid. The personal care agent comprises an antiperspirant or a deodorant. The active agent may include antiperspirant salt comprising an aluminum salt or an aluminum and zirconium salt (preferably aluminum chlorohydrate, aluminum/zirconium

chlorohydrate or a complex of aluminum and zirconium chlorohydrate with glycine).

L8 ANSWER 2 OF 10 WPIDS (C) 2002 THOMSON DERWENT
AN 1999-302735 [25] WPIDS
DNC C1999-088807
TI New bacteria species useful for producing acidified milk products or soft white cheese.
DC B04 D13 D16
IN DESACHY, P; GAIER, W; NEESER, J; POT, B; PRIDMORE, R D; STINGELE, F; PRIDMORE, D
PA (NEST) SOC PROD NESTLE SA
CYC 48
PI WO 9920739 A2 19990429 (199925)* FR 28p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AU BG BR CA CN CZ HU ID IL JP KR MX NO NZ PL SG TR US
AU 9911547 A 19990510 (199938)
EP 1023435 A2 20000802 (200038) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU NL PT SE
BR 9813071 A 20000815 (200045)
MX 2000003283 A1 20001101 (200163)
JP 2001520035 W 20011030 (200202) 39p
AU 743435 B 20020124 (200221)
NZ 503319 A 20020426 (200236)
ADT WO 9920739 A2 WO 1998-EP6636 19981009; AU 9911547 A AU 1999-11547 19981009; EP 1023435 A2 EP 1998-954433 19981009, WO 1998-EP6636 19981009; BR 9813071 A BR 1998-13071 19981009, WO 1998-EP6636 19981009; MX 2000003283 A1 MX 2000-3283 20000404; JP 2001520035 W WO 1998-EP6636 19981009, JP 2000-517060 19981009; AU 743435 B AU 1999-11547 19981009; NZ 503319 A NZ 1998-503319 19981009, WO 1998-EP6636 19981009
FDT AU 9911547 A Based on WO 9920739; EP 1023435 A2 Based on WO 9920739; BR 9813071 A Based on WO 9920739; JP 2001520035 W Based on WO 9920739; AU 743435 B Previous Publ. AU 9911547, Based on WO 9920739; NZ 503319 A Based on WO 9920739
PRAI EP 1997-203245 19971017
AB WO 9920739 A UPAB: 19990630
NOVELTY - New lactic acid bacteria species.
DETAILED DESCRIPTION - The new strains of lactic acid bacteria (A) have a 16S ribosomal RNA characteristic of Streptococcus but have a pattern of total protein, in sodium dodecylsulfate-polyacrylamide gel electrophoresis (SDS-PAGE), that is characteristic of the strain CNCM I-1920, but different from that of all known species of Streptococcus (both species currently classified in this genus and those previously classified but now renamed).
INDEPENDENT CLAIMS are also included for the following:
(1) food and pharmaceutical compositions containing (A);
(2) polysaccharide (I) secreted by strain CNCM I-1924, containing glucose, galactose and N-acetylglucosamine in ratio 3:2:1; or
(3) food and pharmaceutical products containing (I).
ACTIVITY - Probiotic.
MECHANISM OF ACTION - None given.
USE - (A) are used to produce foods, particularly acidified milk products or soft white cheese. Also (I), secreted by (A), is used to make food products, particularly hypoallergenic feeding formulations for infants or allergy sufferers. (A) and (I) may also be used in pharmaceutical compositions, particularly for restoring lactic acid bacteria in the intestinal microflora and to provide a diet balanced as regards essential complex sugars.
ADVANTAGE - Some strains of (A) are able to grow at both mesophilic

and thermophilic temperatures, so are suitable for producing both yoghurt-type products (at 45 deg. C) or soft cheese (at 28 deg. C). This avoids the problem of fouling of machinery caused by thermophilic organisms. Other strains of (A) increase the viscosity of the medium (texturizing biotype), with a greater effect than known texturizing strains (this effect may be observed under both mesophilic and thermophilic conditions). A hydrolyzate of (I) has a sugar composition similar to that of human milk.

TECH UPTX: 19990630

TECHNOLOGY FOCUS - BIOLOGY - Preferred bacterium: For (A), the profile of total proteins (obtained by culture in MRS medium for 24 hr at 28 degrees Centigrade, then extraction and SDS-PAGE) has a Pearson degree of correlation of at least 78, relative to the profile produced under identical conditions from CNCM I-1920.

(A):

(a) can ferment D-galactose, D-fructose, D-mannose, N-**acetyl** -D-glucosamine, salicin, **cellobiose**, maltose, lactose, sucrose and raffinose;

(b) has optimum growth at 28-45 degrees Centigrade (i.e. mesophilic/thermophilic biotype);

(c) ferments semi-skimmed milk at 38 degrees Centigrade to pH 5.2, producing a medium of viscosity over 100 mPa.sec at shear rate 293 sec-1 (texturizing biotype) and

(d) produces an exopolysaccharide containing glucose, galactose and N-acetylglucosamine in ratio 3:2:1.

(A) have the morphology characteristic of Lactococcus lactis.

Preferred compositions: These preferably contain (I) in hydrolyzed form, as a mixture of oligosaccharides containing 3-10 sugar units, particularly formulated with whey protein hydrolyzate. (A) can be incorporated as a fresh, concentrated or dried culture.

Preparation: To recover (I), typically a culture is treated with alcohol or trichloroacetic acid to precipitate proteins and bacteria (which are centrifuged off), and then (I) precipitated from the residual solution by adding e.g. acetone. Optionally (I) is further purified by gel filtration or affinity chromatography. (I) is hydrolyzed using 0.5N trifluoroacetic acid at 100 degrees Centigrade for 30-90 min.

Isolation: Several different lactic bacteria have been isolated from Swiss dairies and characterized genetically and by physiology to define a new group of Streptococcus, sufficiently similar to constitute a new species. These strains have been deposited as CNCM I-1920 to 1926. All these strains contain a sequence identical with, or similar to, a 1522 bp cDNA sequence reproduced (derived from 16S ribosomal RNA).

L8 ANSWER 3 OF 10 WPIDS (C) 2002 THOMSON DERWENT
AN 1998-109347 [10] WPIDS
CR 1992-080068 [10]; 1993-019795 [03]; 1995-138929 [18]; 1995-365798 [47]; 1996-238770 [24]; 1996-505408 [50]; 1998-167950 [15]; 1998-229828 [20]; 1999-119886 [10]; 2001-610636 [62]
DNC C1998-035861
TI New aerobic, Gram-positive, alkaliphilic bacteria - isolated from alkaline soda lakes; used for producing alkali-tolerant enzymes.
DC B04 D13 D15 D16 D18 D25 F06
IN COLLINS, N C; GRANT, W D; JONES, B E
PA (GEMV) GENENCOR INT INC
CYC 1
PI US 5707851 A 19980113 (199810)* 44p
ADT US 5707851 A Div ex US 1992-903786 19920624, US 1994-314045 19940928
FDT US 5707851 A Div ex US 5401657
PRAI US 1992-903786 19920624; US 1994-314045 19940928
AB US 5707851 A UPAB: 20011203

A new single strain of aerobic, Gram-positive, short, irregular, rod-shaped, obligate alkaliphilic bacterium has the following characteristics: (a) forms cream-yellow, small, circular colonies; (b) optimum growth above pH 8; (c) gives a positive response in gelatin hydrolysis, galactose, beta -glucosidase, arginine, bacitracin, N-**acetyl**-D-glucosamine, **cellobiose**, inosine and uridine tests; and (d) gives a negative response in maltose, acetate, D-glucose, D-melibiose, propionate, valerate, glycogen, serine, ampicillin, penicillin G, methicillin, tetracycline, methyl pyruvate, monomethyl succinate and alpha -ketobutyric acid tests.

A different strain of aerobic, Gram-positive, coryneform, obligate alkaliphilic bacterium has the following characteristics: (a) forms mature colonies that are glistening, bright orange-red; (b) grows optimally between pH 9 and 10; (c) gives positive results in arginine, methionine, glycine, valine, methicillin, tetracycline, bacitracin, alpha -cyclodextrin, Tween 40, methyl pyruvate, monomethyl succinate, beta -hydroxybutyric acid and bromosuccinic acid tests; and (d) gives a negative response in gelatin hydrolysis, fumarate, fructose, galactose, D-saccharose, D-melibiose, glycogen, L-serine, beta -glucosidase, N-**acetyl**-D-glucosamine, **cellobiose**, D-sorbitol, D-trehalose and turanose tests.

USE - The new bacterial strains are used for producing alkali-tolerant enzymes that can be used in applications requiring a high pH, e.g. detergent compositions, in leather tanning, in the food, waste-treatment and textile industries, and for biotransformations such as the production of pure enantiomers and the production of natural pigments. (EL)

Dwg.0/4

L8 ANSWER 4 OF 10 WPIDS (C) 2002 THOMSON DERWENT
AN 1993-384121 [48] WPIDS
DNC C1993-171041
TI Synthesis of di O-methyl-D-glucose - for use as specific antigen determinant of Mycobacterium leprae, with potential in diagnostics and vaccine prodn. field.
DC B03 D16
IN BAIRAMOVA, N E; BOVIN, N V
PA (BIOU) BIOTECH RES INST
CYC 1
PI SU 1775404 A1 19921115 (199348)* 5p
ADT SU 1775404 A1 SU 1987-4275840 19870305
PRAI SU 1987-4275840 19870305
AB SU 1775404 A UPAB: 19940120

The method refers to synthesis of 3,6-di-O-methyl-D-glucose, (I), which acts as specific antigene determinant for Mycobacterium leprae. New cpd. 1,2-O-alkylidene-4-O- (per-O-methyl- hexopyranosyl)- 3,6-di-O-methyl-D-glucopyranose, of formula (II), where R is CH3 or C6H5, is used as intermediate prod. for synthesis of (I).

(I) is obtd. by hydrolysis of (II) with mixt. of trifluoroacetic, acetic and 1n hydrochloric acid at ratio (4+/-0.4):6+/-0.6):(3+/-0.3) at 90-100 deg.C. (II) can be obtd. using easily available derivs. of disaccharides, lactose, maltose, and **cellobiose** as starting materials, by **acetylation**, bromination and reaction with tetrabutyl ammonium bromide and sodium borohydride, with chromatographic purificn. The method increases yield of (I) to 70-74%. Produced (I) can be used in diagnostics and in mfr. of vaccines.

USE/ADVANTAGE - As the method of synthesis of cpd. (I), having properties of specific antigene determinant for Mycobacterium lepra. The method increases yield of (I). Bul.42/15.11.92

Dwg.0/0

L8 ANSWER 5 OF 10 WPIDS (C) 2002 THOMSON DERWENT
AN 1993-368704 [46] WPIDS
DNC C1993-163640
TI Rapid large scale prepn. of alpha-D-**cellobiose** octa acetate - by one-step **acetylative** degradation of cellulose or cellulose acetate.
DC B03
IN BERNARD, B L; HYATT, J A; NAYLOR, D M; SANDER, T L
PA (EAST) EASTMAN KODAK CO
CYC 19
PI WO 9322322 A1 19931111 (199346)* EN 16p
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
W: CA JP
US 5294703 A 19940315 (199411) 4p
ADT WO 9322322 A1 WO 1993-US3673 19930419; US 5294703 A CIP of US 1992-877634 19920501, US 1993-44344 19930407
PRAI US 1992-877634 19920501; US 1993-44344 19930407
AB WO 9322322 A UPAB: 19940103
Novel prepn. of alpha-D-cellobiose octaacetate (I) comprises (a) treating cellulose or cellulose acetate with a mixt. of acetic anhydride, acetic acid and a strong acid while keeping at below 80 deg. C; (b) heating at 35-65 deg. C for 8-36 hrs. (esp. at 48-52 deg. C or 20-35 hrs. and followed by cooling to 15-25 deg. C when cellulose acetate is used as the starting material), opt. with addn. of (I)-seed crystals during the heating, such crystal addn. being followed by cooling to 0-30 deg. C; and (c) adding a 1-5C alcohol to quench any remaining acetic anhydride.
The strong acid is H2SO4 or methanesulphonic, trichloromethanesulphonic, chlorosulphonic or trifluoromethanesulphonic acid. The 1-5C alcohol is MeOH (esp. prefd.), EtOH, n- or i-PrOH or n-BuOH.
USE/ADVANTAGE - (I) is useful in the synthesis of prodrugs such as the Tigogenin beta-cellobioside of US4602003 and 4602005 used in treatment of hypercholesterolemia and atherosclerosis. This one step method overcomes the reaction time and reaction vol. problems associated with the Braun synthesis (Org. Synthesis, Collective Vol II, p.124, (1943). Further, cellulose acetate can be subtd. for cellulose as starting material so that acetylation of the OHs can occur prior to the chain degradation and so give a slightly higher yield, albeit with a somewhat longer reaction time.
Dwg.0/0

L8 ANSWER 6 OF 10 WPIDS (C) 2002 THOMSON DERWENT
AN 1993-270159 [34] WPIDS
DNC C1993-120686
TI Bleaching of cellulose pulp to give good brightness - by treating aq. alkaline slurry of pulp with oxygen and peroxide in presence of acyl cpd. or oligosaccharide, etc..
DC F09
PA (SANN) SANYO CHEM IND LTD
CYC 1
PI JP 05186988 A 19930727 (199334)* 4p
ADT JP 05186988 A JP 1992-19472 19920107
PRAI JP 1992-19472 19920107
AB JP 05186988 A UPAB: 19931119
Bleaching of (P) pulp comprises treating (S) an aq. alkaline slurry of (P) with O2 and/or peroxide in the presence of (A) a mono or oligo saccharide or acylated cpd..
(A) is pref. glucose or its acetylated cpd.. (A) is pref. of diose, triose, (D- and L-glyceraldehyde), hexose, tetrose, maltose, **cellobiose**, raffinose, etc., opt. substd. with **acyl** gp.

derived from 1-30C aliphatic carboxylic acid e.g., formyl, acetyl, diacyl, benzoyl, etc.. Amt. of (A) is pref. 0.01-10 wt.% of absolute dry pulp based on (S).

USE/ADVANTAGE - Cellulose pulp can be bleached by oxygen bleach. The bleached pulp has good brightness and can be obtd. without lowering strength of the pulp.

Dwg.0/0

L8 ANSWER 7 OF 10 WPIDS (C) 2002 THOMSON DERWENT
AN 1989-257437 [36] WPIDS
DNC C1989-114441
TI New fluorine-contg. glycoside(s) and their acylate(s) - used against termites and wood-rotting fungi.
DC C02
IN HAYASHIYA, K; KITAHARA, K; MASUTANI, T; SEKI, E; YAMAOKA, R; YOSHIMURA, T; YOSHIMURA, T H
PA (DAIK) DAIKIN IND LTD
CYC 7
PI EP 331089 A 19890906 (198936)* EN 10p
R: DE FR GB
JP 01308402 A 19891213 (199005)
CN 1035512 A 19890913 (199029)
US 5023327 A 19910611 (199126)
CA 1326665 C 19940201 (199410)
ADT EP 331089 A EP 1989-103433 19890227; JP 01308402 A JP 1989-47092 19890227; US 5023327 A US 1989-315535 19890227; CA 1326665 C CA 1989-592199 19890227
PRAI JP 1988-46917 19880227; JP 1989-47092 19890227
AB EP 331089 A UPAB: 19930923
Glycosides of the formulae (I) and (V) are new. n is an even number of 2-20; m is 0, 1, 2, 3, 4 or 5; R is 2-5C acyl. Pref. n is an even number of 12-20, (16 or 18).

USE - (I) destroy organisms which generate energy through the decomposition of glucose, esp. termites e.g. (optotermers formosanus Shiraki, Reticulitermes speratus Kolbe and Cryptotermes domesticus Haviland, and wood-rotting fungi. These organisms contain beta-glucosidase decomposes (I) to give the alcohol HO-(CH2)n-F (IV) which is toxic to the organisms. Other organisms, partic. mammals, have alpha-glucosidase but no beta-glucosidase, so they do not liberate (IV). Thus (I) has selective toxicity against termites and wood-rotting fungi. In use, it is dissolved in a solvent at 10-50 wt.% concn. and carried on a carrier e.g. paper or wood chips. (V) are intermediates in the prepn. of (I).

0/0

L8 ANSWER 8 OF 10 WPIDS (C) 2002 THOMSON DERWENT
AN 1985-114304 [19] WPIDS
DNC C1985-049653
TI New tocopherol derivs. - having antioxidant activity, peripheral vasodilating activity etc..
DC B02
PA (SUNZ) SUNSTAR KK
CYC 1
PI JP 60056994 A 19850402 (198519)* 5p
JP 01055278 B 19891122 (198950)
ADT JP 60056994 A JP 1983-166413 19830908
PRAI JP 1983-166413 19830908
AB JP 60056994 A UPAB: 19930925
Derivs. of formula (I) are new. (R1 is glucose residue, galactose residue or **cellobiose** residue or **acetylated** deriv. residue of the glucose, galactose or **cellobiose**; R2 and R3 are each H or

methyl).

Typical (I) are dl-alpha-tocopheryl glucoside, dl-alpha-tocopheryl galactoside, dl-alpha-tocopheryl cellobioside, dl-alpha-tocopheryl galactoside, 6-0-(beta-2,3,4,6-tetraacetyl glucopyranosyl)-dl-alpha-tocopherol. etc.

USE/ADVANTAGE - (I) may be used as medicines having anti-oxidant activity, peripheral vasodilative activity, etc. Due to the introduction of the saccharose residue, R1, the stability and absorbability of (I) is improved.

0/0

L8 ANSWER 9 OF 10 WPIDS (C) 2002 THOMSON DERWENT
AN 1977-21975Y [01] WPIDS
TI Device for osmotic release, esp. of medicaments - with a semipermeable wall contg. a stabiliser.
DC A96 B07 P32 P33 P34 Q32
PA (ALZA) ALZA CORP
CYC 15
PI BE 848639 A 19770316 (199301)*
NL 7613110 A 19770526 (197723)
DE 2653232 A 19770608 (197724)
JP 52064419 A 19770527 (197727)
SE 7613035 A 19770620 (197727)
DK 7605192 A 19770801 (197734)
FR 2332008 A 19770722 (197734)
ZA 7606900 A 19770913 (197746)
US 4077407 A 19780307 (197813)
GB 1528265 A 19781011 (197841)
AT 7608546 A 19791015 (197944)
IL 50851 A 19791130 (198002)
CA 1074653 A 19800401 (198015)
CH 629957 A 19820528 (198224)
IT 1070481 B 19850329 (198534)
JP 60058724 B 19851221 (198604)
DE 2653232 C 19890824 (198934)
NL 187298 B 19910318 (199114)
PRAI US 1975-634859 19751124; US 1977-864954 19771227
AB BE 848639 A UPAB: 19930901

Device comprises a wall defining a compartment contg. the active agent. The wall is made of material permeable to the liq. medium but practically impermeable to the active agent, and has an opening through which the active agent passes into the liq. medium under the influence of osmotic pressure. The wall material contains a stabiliser which makes it practically inert to the liq. medium and the active agent.

The wall material is pref. a cellulose ester contg. 5 **cellobiose** units in which the ester **acyl** gps. are of formula R4CO(where R4 is H, 1-20C alkyl or 2-20C alkenyl), esp. cellulose acetate. The stabiliser is pref. a cellulose deriv. in which the OH gps. are opt. substd.

The device is esp. useful for the controlled release of medicaments, e.g. by insertion into the gastrointestinal anal or vaginal tract or under the eyelid.

L8 ANSWER 10 OF 10 WPIDS (C) 2002 THOMSON DERWENT
AN 1975-10940W [07] WPIDS
TI 4-(N,N-bis-(2-chloroethyl)-amino)phenol glycosides - from peracetylated sugars and the corresponding phenol hydrochloride.
DC B05
PA (ARND-I) D ARNDT
CYC 1

PI DD 109376 A 19741105 (197507)*
PRAI DD 1973-173203 19730831
AB DD 109376 A UPAB: 19930831
Process for preparing nitrogen mustard glycosides of formula (I): (where R is opt. **acetylated** sugar residue e.g. arabinose, xylose, or **cellobiose**), comprises reacting peracetylated sugar derivs. with the hydrochloride of 4-
N,N-bis-(2-chloroethyl)amino phenol (II) in the melt in the presence of catalytic amts. of p-toluenesulphonic acid and if necessary subsequently deacetylating the product.]USE/ADVANTAGE]The products which could previously only be made by multi-stage processes, are useful as transport forms of cytostatic agents, from which aglycones (the effective cytostatic agent) can be released by enzymatic or hydrolytic splitting.